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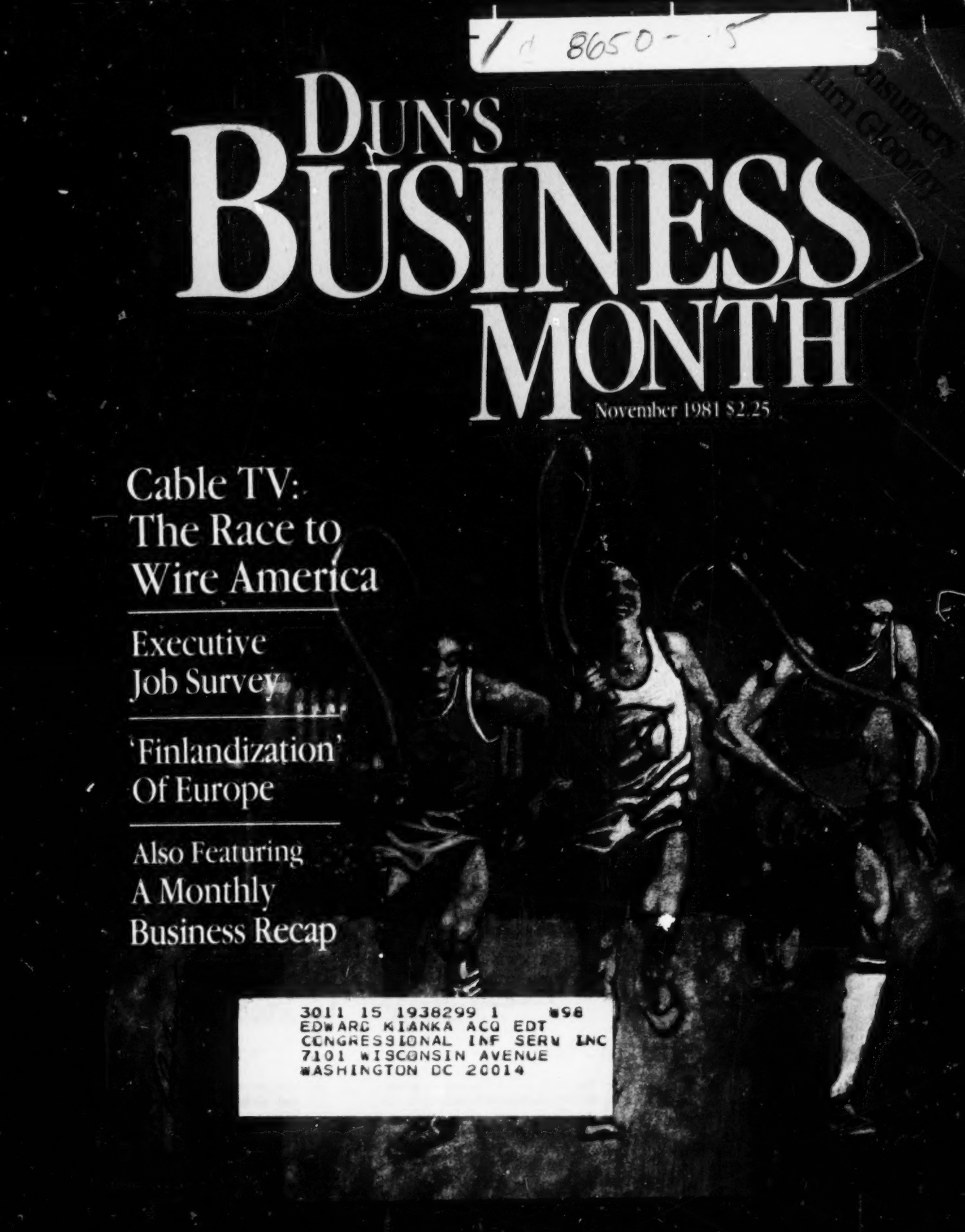

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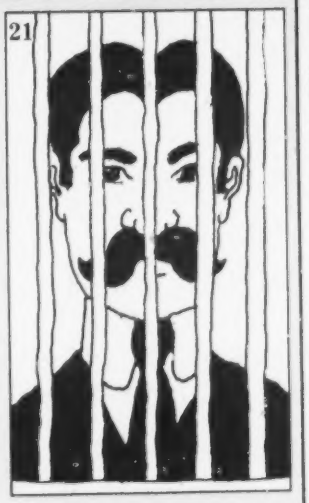

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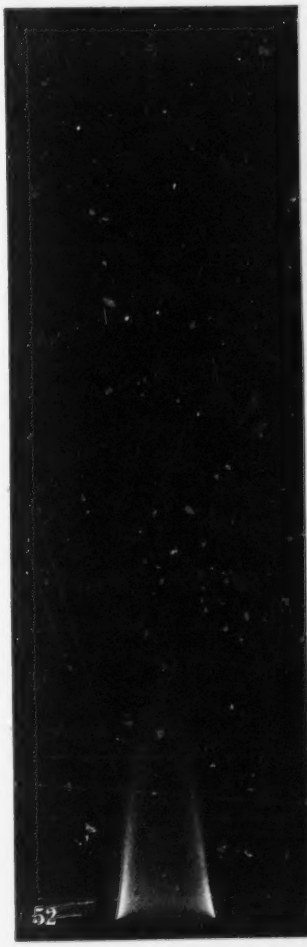

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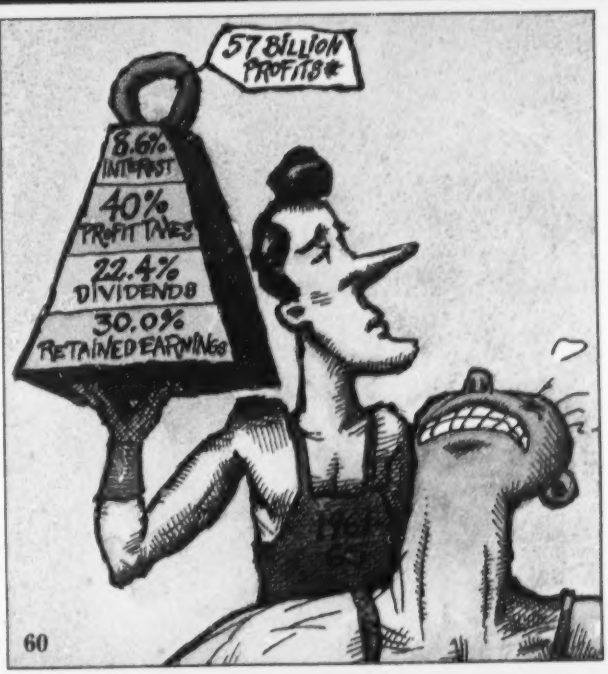

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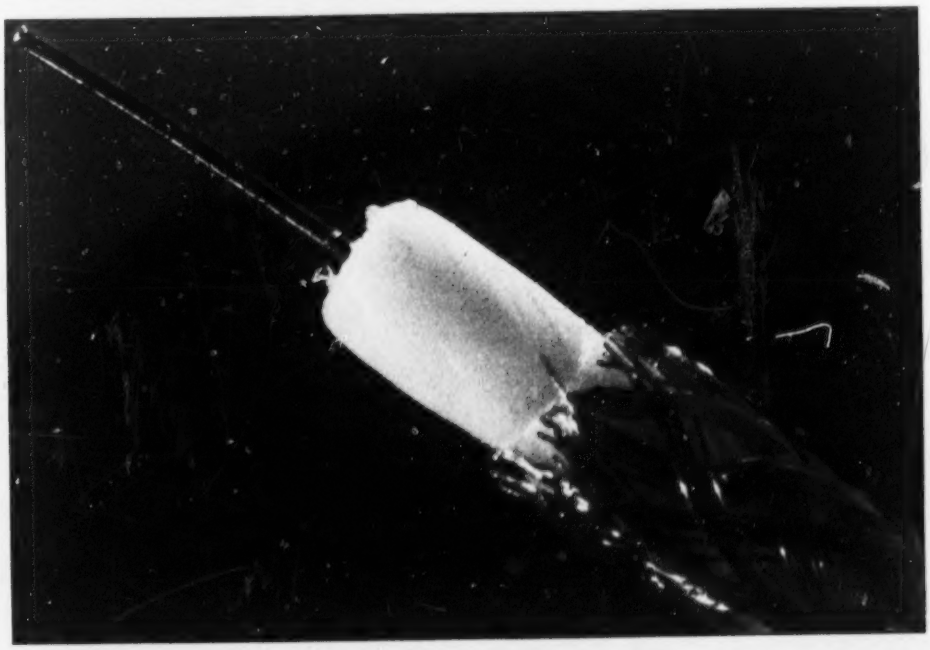

The High Interest Cost Burden

Some companies are coping with their hefty borrowing bills. Others aren't. The bankers make a big difference.

Bankers, rating agencies and bond buyers are all waiting for a financial calamity, and every newspaper reader knows the sick companies causing the concern. Chrysler, International Harvester, Pan Am, Braniff and Massey-Ferguson, among others, live by the sufferance of their lenders. The question is: If one of them sinks into insolvency, will frightened bankers then curb credit to a multitude of other marginal companies?

Some experts believe that this is one way American industry's borrowing binge could end—and it has been some binge. For years, there has been a steady deterioration in every yardstick that measures the liquidity of U.S. business. And like the American government, each year corporations must shell out a growing portion of their revenues to pay the interest on their debt. Wall Street's Salomon Brothers Inc calculates that in 1980 the interest payments of nonfinancial corporations amounted to more than 32% of their operating profits, after adjusting depreciation and inventory for inflation, a huge increase over the 8.6% share they allocated on average from 1961 to 1965.

The mushrooming interest bill has had its heaviest impact on retained earnings (*chart*), leaving companies with less of a cushion in hard times. "This is extremely dangerous in a period of declining earnings, which we may be entering now," says Executive Vice President Philip Delaney of Chicago's Harris Bank.

To see how U.S. corporations are affected by unrelenting high interest rates, DUN'S BUSINESS MONTH surveyed the financial statements of roughly 2,100 nonfinancial companies for the first half of 1981. The aim was to discover who is saddled with sky-

A painful story

high interest expenses and the impact this is having on operating profits. In addition, DUN'S interviewed analysts and bankers to assay what the odds were that there would be a financial collapse as debt-burdened corporations tried to contend with sluggish economic activity.

The experts and the numbers tell the same story—pain, with towering interest costs eroding profits. Major industries such as the airlines, auto companies, farm equipment makers, building materials suppliers and homebuilders are bleeding because of poor sales and whopping debts. Corporations in a variety of other industries—retailing, forest products, petroleum and entertainment—are also hard hit.

The landscape is strewn with companies headed for lower earnings, lower bond ratings and surprise announcements of dividend cuts. "We have already lowered more ratings than we did in 1974–75 period, and we have more companies on our watch list than in 1975," says Senior Vice President Harold Goldberg of Moody's Investors Service, chairman of its rating committee (see tables on page 65 for companies paying the biggest interest bills and those paying more than 50% of operating profits in interest).

Despite this gloomy picture, Goldberg and most other experts say there will not be a wave of bankruptcies. For one thing, the revolution in banking in the last decade has virtually eliminated the old-fashioned credit crunch. These days, it is unlikely that banks will turn off the money machine for companies with low credit ratings because the banks have run out of lendable funds; they can always borrow overseas or sell CDs.

Although the Federal Reserve may have something to say about these lending policies, there aren't many bankers who currently see any let-up in their willingness to lend. "Lenders have more competition from more sources, and everyone wants to maintain market share," explains Senior Vice President Everil Loyd of Los Angeles' Security Pacific Bank. In the

The Growing Weight of Interest

Pretax profits, adjusted for inflation, have more than tripled in the past two decades, but the share going to interest expenses has grown even faster, from 8.6% of profits to 31.2%. The percentage of profits going to dividends has remained steady, but taxes on profits have slipped and the share left for retained earnings has plummeted.

**Pretax profits of nonfinancial corporations, after inventory profits and inflation-adjusted depreciation, plus net interest.*

Source: Salomon Brothers Inc

International Harvester and Chrysler cases, rather than calling in their loans, the bankers took equity positions in the troubled companies in hope of recouping their outlays.

None of this means that the bankers have forgotten their losses of 1974–75. "I don't see any foolish lending," says Vice President Robert Chadwick of Seattle's Rainier Bancorp. In Philadelphia, Executive Vice President Carl Stern of Fidelity Bank observes that banks get on to potential problems earlier and begin pressing overly leveraged customers to clean house.

Companies, too, are much more financially sophisticated than they were last time, according to Rainier's Chadwick. They have developed strategies for raising cash and keeping down debt that were undreamt of years ago. The large, well-known corporations use the Eurodollar market and commercial paper. And companies large and small

Inventories on short leash

wheel and deal to pick up spare cash by selling off excess real estate and excess businesses. Retailers and manufacturers have kept inventories on a short leash, and many companies that might have been swamped by short-term debt at floating rates aren't because management stretched out the debt last year or sold equity earlier this year.

Take the retailers. Traditionally, they use short-term loans because they are cheaper and they match the short-term nature of their inventories. But the historical savings from short-term rates vanished most of last year and this. Thus, financially nimble retailers have cut back on short-term borrowing. Best Products, for one, was able to do this after it raised $20 million in new equity late last year. Comments analyst Robert J. Simonson of Wall Street's Kidder, Peabody & Co.: "The well-timed issue repaired the company's balance sheet and made it less vulnerable than other retailers to high interest costs." Similarly, J.C. Penney Co. rolled over $700 million in short-term debt into long-term debt at a healthy savings when compared to current short-term rates.

But Wickes Corp., Sears, Roebuck and F.W. Woolworth, to name a few, are struggling with crushing interest loads. Wickes was a leading retailer of building materials when it acquired Gamble Skogmo last year, thrusting itself into apparel, appliance, furniture, food and drug retailing. Thus, according to Value Line analyst Thomas W. Pratt, Wickes will probably carry on average almost $300 mil-

More Interest Than Profits

Here are thirty companies for whom interest expense represented more than half of their combined pretax earnings and interest in the first half of 1981. The list includes only companies that paid at least $30 million in interest and is drawn from the reports for about 2,100 nonfinancial companies.

COMPANY	6 Month Interest (in millions)	6 Month Pretax Profit (in millions)
Braniff International	$ 49	$ – 62
Continental Airlines	30	– 39
Chrysler	139*	–269
Filmways	37	–111
Pan American World Airways	70	–211
Warner-Lambert	38	– 38
Ford Motor	315	–298
United Airlines	69	– 43
Coastal	98	– 38
Republic Airlines	57	– 20
Eastern Airlines	70	0
Jim Walter	81	1
F.W. Woolworth	81	1
Evans Products	35*	2
AVCO	203	61
Sears, Roebuck	710*	242
Tiger International	92	33
Lockheed	87	45
GDV	58	30
Ashland Oil	57	33
American Airlines	62	36
City Investing	154*	93
Western Union	44	32
Singer	54	42
Dome Petroleum	193	151
NVF	55	48
RCA	186	168
U.S. Home	31	30
Sharon Steel	47*	46
Charter	52	51

*net interest after interest income and/or interest capitalization.

lion in short-term borrowing this year.

As a result, one banker reports bank creditors have been pressing Wickes to reduce its debt load by selling off some of the businesses it acquired. If Wickes could sell $200 million worth of assets, E.F. Hutton analyst John Tilson believes, the company would be out of the woods. Otherwise, he says, "next year will be trouble, and it may have to eliminate the dividend."

At Sears, which still has 60% of its debt in short-term arrangements, interest expense of the merchandising group (excluding its finance company subsidiary) climbed to $379 million in the first half of 1981 from $284 million during the like period a year earlier. Analyst Margaret Gilliam of First Boston Corp. calls Sears' $5 billion in short-term debt "absolutely incredible. That exceeds the sales of most companies. It will erode profits significantly, no question." Kidder, Peabody analyst Daniel D. Barry agrees that interest costs represent "a major swing factor for the company's profits. Operating income was up substantially in the second quarter, but it was watered down severely by interest expense."

Among home construction and building materials suppliers, the suffering is severe. Some companies such as Ryan Homes, Pulte and Ryland appeared to weather the storm well, but now many analysts see problems. They are cutting earnings estimates and raising doubts about the maintenance of dividend levels for U.S. Home, Shapell Industries, Evans Products and Jim Walter Corp., among others. The extent of the interest burden of U.S. Home and Shapell is camouflaged by their use of capitalized interest, says analyst Thornton (Ted) O'glove of the *Quality of Earnings Report*.

In certain situations, accounting rules permit a company to include interest as part of the cost of a capital project, so the full amount is not reflected in current costs. Value Line notes that the bulk of Shapell's $225 million in debt is tied to the prime and estimates that the interest eats up 80% of the company's operating profits. "It would be worse if Shapell didn't capitalize 50% of its interest charges," Value Line adds.

Many highly-leveraged airlines are caught between the rock of high interest payments and the hard place of reduced traffic. Braniff and Pan Am have worked out special arrangements with their bankers, permitting their continued operations. Among the remainder, Republic appears to be in the worst cash bind, with $700 million in long-term debt largely tied to the prime. To improve its position, it has sold off some aircraft, sold equity to employees in lieu of part of their salaries and is postponing raises for others. On the whole, however, the airlines, predicament is being eased by the bankers' attitudes. "The bankers have been so supportive, it is difficult to see any casualty in the industry even if traffic does not pick up and interest rates remain high," observes analyst Eva Holman of Donaldson, Lufkin & Jenrette.

And the bankers are key to what happens from here on. Many believe that in 1975 they contributed to bankruptcies, and to their own financial plight, by giving up on some customers too soon. This time, they are bending over backwards not to repeat that unhappy bit of history. So far,

Wow! What a Bill.

The 25 companies that paid the largest bills for interest in the first half of 1981.

COMPANY	6 MONTH INTEREST (in millions)
American Telephone & Telegraph	$2,115
Sears, Roebuck	710*
General Telephone & Telegraph	502
British Petroleum	476*
Tenneco	397
Shell Oil	392
International Telephone & Telegraph	389*
General Motors	365
Exxon	341*
Ford Motor	315
Dow Chemical	285
Mobil	245
Atlantic Richfield	224*
Standard Oil of Ohio	222*
Sun	213*
AVCO	203
General Electric	198
Dome Petroleum	193
RCA	186
Phillip Morris	183
International Business Machines	181
Texaco	164*
Standard Oil (Indiana)	161*
City Investing	154*
Sperry	139

*net interest after interest income and/or interest capitalization.

their own loan losses haven't gone up, but analysts report that corporate delinquencies are now inching up. Thus, the bankers may soon have to reevaluate their position and ask: Are they saving themselves as well as their customers, or are they throwing good money after bad?

While the banks are key, the Fed may take the decision out of their hands. Fed chief Paul Volcker recently expressed concern about the run-up of business loans at large banks and bankers may be forced to restrain their lending activities. Concludes Chairman John F. McGillicuddy of Manufacturers Hanover Trust Co., "The period of readily available credit, albeit at a high cost, may be coming to a close." —ARLENE HERSHMAN

Making Money In Stock-Bond Swaps

New corporate-finance twist strengthens the balance sheet and boosts profits.

Why would a company swap, say, $20 million in newly issued common shares for a like amount of its outstanding debt on which it pays only 7% or 8% interest?

Because it's profitable.

This newest twist in corporate finance—engineered by an imaginative banker, Warren M. Foss Jr. of Salomon Brothers Inc, and an equally creative attorney, Edward D. Kleinbard of Cleary, Gottlieb, Steen & Hamilton—is on the way to becoming one of this year's most widely copied new devices.

Quaker Oats pioneered the first swap in early August and was followed in rapid order by Bankers Trust, Wells Fargo & Co., Heublein and Castle & Cooke. Says Foss: "Swaps are suitable for a broad range of companies, and the benefits are more impressive than the size of the transaction might indicate." Adds Executive Vice President Theodore Kesselman of Bankers Trust: "It is a modest transaction, but from the standpoint of what it accomplishes, it adds up to all pluses."

Small deal, big benefits

Buying up bonds is nothing new, of course. Over the years, corporations have bought debt to satisfy sinking fund requirements, even buying more than immediately needed to avoid being trapped by professional bond collectors who try to corner the market in issues with sinking fund requirements. In addition, retiring debt at a discount boosted earnings per share. Accounting rules permit the difference between the debt's par value and its discounted market price to be taken directly into ordinary earnings if a cash purchase is made to satisfy sinking fund requirements or the gain is not material. Not surprisingly, many blue-chip companies—and others not so blue—have used this ploy to pad a sagging P&L statement.

But the Bankruptcy Act of 1980 tightened the rules on bond purchases for cash, and as of January 1, 1981 made the gain on them taxable. Thus, necessity mothered the swap transaction.

The deal sounds simple enough. An investment banker buys up bonds from institutional holders, giving them cash or other securities in exchange. Then it takes the bonds to the issuing company, which gives it in exchange either treasury or newly issued shares. Because it is a swap of one security for another, it falls under the provision for tax-free exchanges. The investment banker has the option of selling the shares in a registered secondary offering, keeping it in inventory or swapping it. In the process, the banker earns a commission roughly equal to the underwriting markup on an equity offering. But the banker also takes a big risk, since the stock's price may decline, and for legal and business reasons the investment house may not hedge the transaction.

The payoff from the exchange of equity for debt is largest for the company with sinking fund bonds selling at a deep discount from par—at 80 or less. Because that debt becomes more expensive to buy each year as it approaches retirement, a company can realize real economic gains when the swap is analyzed on a present value basis, says Vice President Donald Moore of Morgan Stanley & Co.

For bank holding companies, the reward comes from enhanced potential for future growth. The swap increases their ratio of equity to assets, which is a key yardstick of bank strength and safety. It also adds to lending capacity. Depending on the bank, each $1 of equity translates into between $20 and $40 in lending power. Thus, Wells Fargo's $20 million in new equity could translate into a half billion dollars in additional lending capacity.

For many companies, the boost to earnings is the main lure. In Quaker's swap, the gain was $4.9 million, equal to roughtly 25 cents a share. Wells Fargo picked up $7 million, or 30 cents a share, and Bankers Trust added $6 million, or 24 cents a share. If the amount is material, current accounting rules say the gain must be included as extraordinary income. In the case of most giant companies, the amounts probably are not material—but they certainly aren't insignificant. —A.H.

Executive Jobs: A Flat Year

Economic uncertainty has finally caught up with the executive job market, and the number of openings is virtually unchanged from a year ago. However, salaries continue to escalate.

For the first time in eight years, DUN'S annual survey of the executive job market shows no year-to-year increase in the number of jobs available. Clearly, openings at the management level are being affected by the many adverse factors—persistent high interest rates, inflation, the threat of recession—that are making business planning more difficult than usual right now.

As in past years, the current survey has been put together with the help of twenty of the nation's leading recruiters, who have given us their first-hand views on what is happening in the executive job market and provided a compilation of their current searches paying $40,000 and up *(beginning on page 110)*. Because of a change in participating firms, the current job list cannot be compared exactly with the one published last year. But figuring only the nineteen firms that participated in both years, the number of openings is virtually the same.

The fact is that much of the business community is in an ambivalent mood, torn between confidence and concern. Business strongly favors President Reagan's economic program. But there are nagging doubts about whether it will succeed; and if it does, how long it will take. Management is especially concerned about those punishing interest rates, recruiters say, and many companies are marking time on hiring until the rates show a perceptible downturn. "There hasn't been so much watching and waiting in executive suites for years," says Chairman Lester Korn of Korn/Ferry International.

According to Korn, companies are replacing essential executives who die, retire or leave for other reasons,

A particularly vexing problem for companies is that rising relocation costs are forcing them to fatten their compensation packages.

but they are holding back on plans to hire additional people. If the Reagan program starts to take hold in the next few months, he expects a boom in executive hiring to follow, since the pent-up demand is there. If not, of course, the job market, along with the economy, could be in for a serious recession.

The larger economic issues aside, the merger epidemic of recent months has also had a dampening effect on the corporate job market. When a Nabisco merges with a Standard Brands, or a Prudential with a Bache, a principal aim is to create a more efficient entity. Inevitably, some people at middle-management levels and higher are let go, and both merger partners generally refrain from hiring executives for some time.

Three areas are particularly soft. With stock and bond prices severely depressed, most of Wall Street, still skeptical about the Reagan program,

Depressed areas

is in no mood to do much hiring. Home builders, fighting to keep the wolf from their own doors, are letting executives go, not seeking them. And Detroit's long depression has ended most hiring by the auto companies and their many suppliers. One recruiter reports getting a recent assignment to find a new president for a rubber company who would be capable of directing the company's diversification away from the auto market.

Despite the generally static job market, however, there is one unmistakably bullish trend in executive recruiting: the increase in jobs paying $100,000 or more. Several of the largest search firms report that while their total number of searches is down, jobs available at the six-figure level are up sharply—about 50% in just two years.

Comparing DUN'S own listings, the current survey shows 22% of the available jobs paying $100,000 and up, compared with 17.7% last year. The trend is particularly evident in general management, where fully 40.5% of the jobs are at that level, versus 31.5% a year ago.

Recruiters cite three reasons for the upsurge. One, of course, is inflation, which continues to boost salaries at every level. Another is the shortage of top-caliber executives in the 40-to-50 age bracket—a belated effect of the low birth rates of the 1930s.

Added to that, a particularly vexing problem for companies right now is that rising relocation costs are forcing them to fatten their compensation packages. With sky-high housing costs and interest rates added to all the other reasons executives do not like to relocate, Chicago-based recruiter Donald DeVoto calculates that it can take as much as 60% more money to persuade an executive to make a move. Some companies, in fact, have told recruiters they will settle for the best available talent to be found locally rather than grapple with the problems of relocation.

The strongest demand for executives is coming from commercial and investment banks, both busily expanding into new areas in which they need to acquire expertise from the outside. Even the beleaguered savings and loan industry, also looking to diversify, is recruiting now. And the insurance companies, which have traditionally groomed their own executives, are now reaching outside for the talent they need to become more competitive against all their financial rivals.

Also active in the talent hunt are the energy companies, especially those in oil and coal; the high-technology companies; and the makers of consumer packaged goods, a field in which job-hopping by executives is particularly prevalent.

As is usual in difficult times, companies are looking particularly hard for experienced management generalists with proven ability to handle profit-center responsibilities. Demand is

Executives in demand

also strong for skilled marketing executives—which some recruiters attribute at least in part to the ever-increasing competition from the Japanese—and for top financial experts. In fact, finance is the one area in which the number of openings on the current job list is up significantly over last year. "The quasi-recession obviously has created an ongoing need for chief financial officers who can guide a company to better asset management," observes Roger Kenny, a partner at Spencer Stuart Associates.

Certain professional specialists are also in greater demand. The data-processing executive, for one, is becoming increasingly important as an adviser to top management. Just a few years ago, top data-processing executives could command perhaps $60,000, according to Herbert Halbrecht, whose firm specializes in such recruiting. As demand has grown, however, the salary level has at least doubled, and Halbrecht reports recently placing two data-processing specialists at base salaries of $120,000. "Top management is beginning to realize that effective information processing is one of the engines that drives the company," he says.

—JOHN PERHAM

The Current Job Openings

This year, as in every year since 1974, DUN'S has put together its own survey of the executive job market in cooperation with twenty of the nation's leading search firms, which have furnished us their lists of active searches.

Because of a change in participating firms, this year's list is not exactly comparable to last year's. But counting only the jobs listed by firms that took part both years, this is the first year since the survey began that the number of jobs available has not increased. However, the percentage of jobs paying $100,000 or more continues to escalate. The firms participating in the survey are listed on page 134.

GENERAL MANAGEMENT

POSITION	INDUSTRY	LOCATION	SALARY
Chief Executive Officer			
	Engineering	Midwest	$275,000
	Service	West	250,000
Chairman	Food	East	200,000+
President	Electronics	Northeast	200,000+
	Cement	Intl.	160,000
President	Mining	East	150,000
President	Service	East	125,000
	Manufacturing	Midwest	125,000
Chairman	Food	Southwest	100,000
President	Instruments	East	100,000
President	Mining	South	100,000
President	Manufacturing	South	90,000
President	Manufacturing	East	75,000
President	Medical Equipment	West	65,000
President			
	Insurance	East	350,000
	Manufacturing	Midwest	300,000
	Consumer Products	West	300,000
	Chemicals	East	250,000
	Electronics	West	250,000
	Communications	Southeast	200,000+
	Insurance	East	200,000
	Advertising	East	200,000
	Manufacturing	East	200,000
COO	Consumer Products	East	200,000
	Holding Company	Southwest	200,000
	Service	East	200,000
	Paper	West	200,000
	Pharmaceutical	East	200,000
	Consumer Products	East	200,000
	Electronics	West	200,000
	Chemical	Canada	200,000
	Computer	West	185,000
COO	Electric	East	180,000+
	Computer	Midwest	175,000
	Manufacturing	East	175,000
	Insurance	Midwest	170,000
	Food	East	150,000+
COO	Food	Midwest	150,000+
	Manufacturing	Northeast	150,000+
	Communications	South	150,000
COO	Real Estate	West	150,000
	Manufacturing	East	$150,000
COO	Real Estate	Southwest	140,000
	Energy	Southwest	130,000
	Communications	Midwest	130,000
	Advertising	East	125,000
	Manufacturing	Northeast	125,000
COO	Insurance	West	125,000
	Manufacturing	Northeast	125,000
General Mgr.	Industrial Products	Northeast	125,000
	Construction	Canada	125,000
	Manufacturing	East	120,000+
	Manufacturing	Intl.	120,000
	Electronics	West	110,000
	Real Estate	Northeast	110,000
COO	Electronics	West	110,000
	Manufacturing	Midwest	100,000+
	Chemicals	Midwest	100,000+
	Commodities	Midwest	100,000+
	Transportation	Midwest	100,000+
	Food Service	East	100,000
	Mining	South	100,000
	Transportation	Midwest	100,000
	Leisure	Midwest	100,000
	Apparel	West	100,000
	Metals	Midwest	100,000
	Medical	Midwest	100,000
	Insurance	West	100,000
	Telecommunications	Midwest	100,000
	Publishing	West	100,000
	Natural Resources	East	100,000
	Insurance	East	100,000
	Manufacturing	Northwest	100,000
	Manufacturing	Northwest	98,000
	Insurance	Midwest	95,000
COO	Paper	Southeast	95,000
	Consumer Products	East	95,000
	Consumer Products	Northeast	90,000+
	Manufacturing	South	90,000
	Consumer Products	East	90,000
	Manufacturing	East	90,000
	Chemical	South	90,000
	Apparel	East	90,000
	Manufacturing	Southwest	85,000
	Manufacturing	East	85,000
	Natural Resources	Alaska	85,000
	Manufacturing	East	85,000
COO	Electronics	West	85,000

POSITION	INDUSTRY	LOCATION	SALARY
	Manufacturing	East	$ 85,000
	Hospital Supplies	Midwest	80,000+
	Insurance	Northeast	80,000+
	Service	West	80,000
	Transportation	East	80,000
	Construction	Midwest	80,000
	Electronics	Midwest	80,000
	Manufacturing	East	80,000
	Electronics	West	80,000
	Electronics	East	80,000
	Pharmaceuticals	East	80,000
	Electronics	East	80,000
	Manufacturing	Southwest	80,000
	Insurance	Midwest	75,000+
COO	Service	West	75,000
	Petroleum Equipment	South	75,000
	Consumer Products	East	75,000+
	Leisure	East	75,000
	Manufacturing	Midwest	75,000
	Apparel	Canada	75,000
	Commodities	Midwest	70,000
COO	Retail	South	70,000
COO	Medical	Midwest	70,000+
	Coal	Northeast	68,000+
	Real Estate	West	65,000
	Insurance	East	60,000
	Holding Company	Southwest	60,000
	Real Estate	Northeast	55,000
	Apparel	Southwest	55,000
	Machinery	Southeast	50,000
	Education	Northwest	45,000
	Electronics	South	45,000
	Mining Equipment	East	45,000
	Publishing	East	40,000
	Construction	Northeast	40,000
Chief Operating Officer			
	Conglomerate	Northeast	200,000+
	Insurance	West	100,000+
	Insurance	West	100,000
	Electronics	Northeast	90,000
	Metal Products	West	75,000
	Manufacturing	Midwest	70,000+
Executive VP			
	Energy	East	250,000
	Machinery	Midwest	150,000+
	Manufacturing	East	150,000+
	Real Estate	Southwest	135,000
	Retail	East	135,000
	Insurance	Midwest	125,000
	Food	West	125,000
	Ballbearings	Northeast	100,000+
	Real Estate	West	100,000
	Energy	West	100,000
	Industrial Products	Midwest	80,000
	Manufacturing	Midwest	60,000
	Advertising	West	60,000
Senior VP			
	Retail	West	175,000
	Electronics	East	150,000
	Insurance	Northeast	$100,000
	Consumer Products	West	100,000
	Insurance	Northeast	100,000
	Communications	South	100,000
	Chemicals	South	65,000
Property Man.	Real Estate	West	50,000
Group VP			
	Retail	East	200,000
	Industrial Products	Midwest	100,000
	Service	South	60,000
Vice President			
International	Consumer Products	East	160,000
	Chemicals	Northeast	150,000
Operations	Industrial	East	150,000
International	Chemicals	East	125,000+
Operations	Transportation	Northeast	120,000
	Construction	South	110,000
	Construction	Southwest	110,000
Operations	Real Estate	South	100,000
	Glass Products	Midwest	100,000
	Insurance	South	100,000
Administration	Service	Midwest	85,000
	Energy	Southwest	80,000
	Apparel	East	80,000
Assistant	Real Estate	West	80,000
	Hotel	West	80,000
	Coal	Midwest	80,000
	Energy	Southwest	80,000
	Insurance	Midwest	80,000
	Manufacturing	Midwest	75,000+
Operations	Construction	Northeast	75,000
Development	Real Estate	West	75,000
	Manufacturing	East	75,000
	Real Estate	Southwest	75,000
	Instrumentation	West	75,000
Operations	Service	Midwest	70,000
	Apparel	West	70,000
	Insurance	South	70,000
	Distribution	West	65,000
	Publishing	East	65,000
	Insurance	East	65,000
Administration	Electronics	Midwest	60,000
	Transportation	Southwest	60,000
Operations	Real Estate	South	60,000
	Materials	Midwest	60,000
	Real Estate	West	60,000
	Industrial Products	Northeast	60,000
	Retail	South	60,000
Administration	Financial Services	Northeast	60,000
	Printing	West	60,000
Distribution	Consumer Products	Southeast	60,000
	Chemical	Midwest	50,000+
	Publishing	East	50,000
	Communications	Midwest	50,000
Transportation	Chemical	East	50,000
General Manager			
VP	Energy	West	150,000
VP	Computer	West	150,000

(continued)

POSITION	INDUSTRY	LOCATION	SALARY
(General Manager cont.)			
VP	Consumer Products	South	$125,000
	Auto	Midwest	100,000+
	Paper	East	100,000
	Shipbuilding	Northeast	100,000
VP	Consumer Products	Midwest	100,000
VP	Computer	Northeast	85,000
VP	Service	West	75,000
	Real Estate	Southwest	75,000
	Real Estate	Southwest	70,000
VP	Medical Equipment	Northeast	70,000
	Apparel	West	70,000
	Consumer Products	West	70,000
	Chemicals	Midwest	65,000
	Electronics	South	63,000
	Energy	Southwest	60,000
	Industrial Products	East	60,000
	Real Estate	Southwest	60,000
VP	Transportation	Southwest	55,000
	Publishing	West	50,000
	Film Equipment	Northeast	45,000
	Food	Midwest	45,000
Director			
Development	Real Estate	West	100,000
Facilities	Electronics	West	100,000
	Manufacturing	South	100,000
Facilities	Consumer products	East	90,000
	Insurance	Midwest	80,000
International	Electronics	Southwest	75,000
	Real Estate	West	75,000
Operations	Real Estate	West	70,000
	Aerospace	Northeast	70,000
District	Electronics	East	65,000
	Manufacturing	East	60,000
	Food	Midwest	60,000
Operations	Paper Products	West	56,000
	Pharmaceutical	Midwest	55,000+
Media	Advertising	West	50,000
Operations	Utility	Canada	50,000
Property Man.	Real Estate	East	45,000
Underwriting	Insurance	West	40,000
Manager			
Development	Real Estate	West	100,000
	Electronics	East	75,000
	Construction	Midwest	70,000
Branch	Real Estate	South	70,000
Regional	Real Estate	Midwest	67,000
	Medical Equipment	West	66,000
	Chemical	Midwest	65,000
Administration	Diversified	East	65,000
	Real Estate	West	65,000
Property	Real Estate	Midwest	60,000
Operations	Materials	West	60,000
	Retail	East	60,000
Construction	Real Estate	Midwest	55,000
International	Consumer Products	Southwest	52,000
	Consumer Products	Midwest	50,000+
	Pharmaceutical	Northeast	50,000
Regional	Warehousing	Midwest	50,000
Regional	Warehousing	East	50,000
Construction	Real Estate	East	$ 50,000
	Manufacturing	East	50,000
Branch	Distribution	West	50,000
	Distribution	Southwest	45,000
	Transportation	Midwest	45,000
Property	Real Estate	West	45,000
Property	Real Estate	Midwest	45,000
Administration	Insurance	West	40,000
Miscellaneous			
Group Executive	Conglomerate	Northeast	100,000+
Partner	Real Estate	West	100,000
Broker	Shipping	London	90,000
Senior Executive	Coal	East	80,000+
General Liability	Insurance	East	65,000
Managing Director	Electronics	Midwest	60,000
Senior Executive	Utilities	Northeast	50,000+
Group Leader	Chemical	Southwest	50,000

DIVISION

President			
International	Electronics	Midwest	250,000
	Electronics	Northeast	200,000+
	Energy	East	130,000
	Machinery	Midwest	110,000
International	Food	East	110,000
	Service	Southeast	90,000
	Food	Southeast	80,000
	Manufacturing	West	60,000
Vice President			
Ind. Products	Electronics	East	150,000
Mining	Banking	Midwest	60,000
International	Consumer Products	Midwest	60,000
	Restaurant	Northeast	45,000
General Manager			
	Electronics	West	100,000
	Distribution	East	100,000
	Photo Products	West	100,000
	Real Estate	Northeast	100,000
	Machinery	Midwest	90,000
	Trading	West	90,000
VP	Electronics	East	85,000
	Environmental	Midwest	85,000
	Printing	Northeast	80,000
	Real Estate	Southwest	80,000
	Energy	Southwest	75,000
	Metals	Canada	75,000
	Electronics	Northeast	74,000
	Construction	East	55,000
VP	Electronics	West	55,000
	Diversified	Canada	55,000
	Mining	Canada	52,000
VP Canada	Consumer Products	Northeast	50,000
	Utility	Southwest	50,000
	Metals	Southwest	45,000
	Industrial Products	Canada	45,000
Manager			
Semiconductors	Electronics	East	120,000
	Real Estate	West	60,000
	Electronics	East	58,000

(continued)

FINANCE

POSITION	INDUSTRY	LOCATION	SALARY
Chief Executive Officer			
	Financial Services	West	$200,000
President			
COO	Banking	Midwest	200,000
	Financial Services	West	200,000
COO	Banking	East	150,000
	Investment	Northeast	135,000
	Investment	Northeast	120,000
	Financial Services	East	100,000
	Financial Services	West	90,000+
	Banking	Southeast	80,000
	Banking	West	80,000
	Banking	Midwest	75,000
Chief Financial Officer			
	Financial Services	West	175,000
Sr. VP	Retail	Northeast	150,000
VP	Investment	West	125,000
	Manufacturing	Midwest	125,000
	Real Estate	Southeast	115,000
	Financial Services	West	100,000
	Consumer Products	West	100,000
	Financial Services	West	100,000
	Leasing	West	100,000
	Retail	Southwest	100,000
VP	Metals	Midwest	80,000+
	Computer	West	75,000
	Real Estate	West	75,000
	Advertising	West	75,000
	Banking	East	70,000
	Consumer Products	West	70,000
	Retail	Southwest	70,000
	Industrial Products	Midwest	65,000
	Consumer Products	Northeast	60,000
VP	Financial Services	West	60,000
	Manufacturing	West	55,000
Executive VP			
	Banking	Northeast	300,000
Operations	Financial Services	Northeast	125,000+
	Banking	West	125,000
	Banking	Northeast	100,000+
	Insurance	East	100,000
	Banking	East	100,000
	Insurance	Northeast	100,000
Mortgage	Banking	East	65,000
Senior VP			
	Financial Services	East	200,000
	Energy	Southwest	175,000
Chief Economist	Financial Services	Midwest	175,000
Corp. Devel.	Banking	East	125,000
	Investment Banking	East	120,000
	Real Estate	Southwest	105,000
Retail Marketing	Banking	Midwest	100,000
	Communications	West	100,000
Investments	Banking	West	100,000
	Transportation	West	85,000
Investments	Banking	West	$ 80,000
Economist	Banking	Southwest	80,000
	Banking	East	80,000
Investments	Banking	Northeast	80,000
Credit Services	Banking	East	80,000
	Finance	East	75,000
	Insurance	West	75,000
	Banking	Midwest	60,000
Commercial	Financial Services	Midwest	60,000
Vice President			
	Conglomerate	Northwest	300,000
	Manufacturing	West	225,000
	Manufacturing	East	175,000
	Real Estate	Canada	170,000
	Chemical	Northeast	150,000+
	Manufacturing	Northeast	150,000+
	Investment	Northeast	150,000
	Manufacturing	Northeast	150,000
	Banking	East	150,000
	Energy	Canada	135,000
	Technology	Midwest	130,000+
	Manufacturing	Midwest	130,000
	Manufacturing	East	120,000
	Apparel	East	120,000
Employee Trust	Financial Services	Midwest	115,000
Tax	Real Estate	Midwest	110,000
	Manufacturing	Midwest	100,000+
Project Finance	Banking	East	100,000
	Financial Services	Southwest	100,000
Equity Trading	Financial Services	West	100,000
Project Finance	Banking	North	100,000
	Distribution	West	100,000
	Electronics	South	100,000
	Financial Services	East	100,000
	Communications	South	100,000
	Apparel	West	100,000
	Banking	Southwest	100,000
	Banking	East	100,000
	Equipment	Canada	100,000
Loan Synd.	Banking	East	90,000
Natl. Marketing	Banking	West	90,000
Economist	Banking	East	90,000
Project Finance	Banking	East	85,000
Acquisitions	Investment Banking	East	80,000
	Banking	Northeast	80,000
	Financial Services	East	80,000
	Distribution	Midwest	80,000
	Manufacturing	Midwest	80,000
	Manufacturing	Northeast	75,000+
Corp. Finance	Investment Banking	West	75,000
	Marketing	Northwest	75,000
Estimator	Real Estate	South	75,000
	Banking	East	75,000
	Banking	West	75,000
	Financial Services	East	75,000
	Chemical	Southwest	75,000
Economist	Banking	Midwest	75,000
	Investment	Northeast	75,000
	Insurance	Northwest	73,000

(continued)

POSITION	INDUSTRY	LOCATION	SALARY
(Financial VP cont.)			
	Banking	Northeast	$ 70,000
	Auto	Midwest	70,000
	Banking	East	70,000
	Insurance	Northeast	70,000
	Investment	Northeast	70,000
	Banking	Northeast	70,000
Economist	Banking	Midwest	70,000
	Service	West	70,000
Corp. Development	Transportation	West	70,000
Tax Leasing	Financial Services	West	67,000
	Publishing	Northeast	66,000
Assistant	Banking	East	65,000
	Communications	Southwest	65,000
	Electronics	West	65,000
	Medical	East	65,000
	Medical Instruments	West	65,000
	Banking	East	65,000
Real Estate	Banking	East	65,000
Trust	Banking	East	63,000
	Financial Services	West	61,000
	Investment	Northeast	60,000+
	Financial Management	East	60,000
	Banking	West	60,000
	Banking	East	60,000
Real Estate Inv.	Financial Services	West	60,000
	Banking	East	60,000
	Motion Pictures	Southwest	60,000
	Industrial Products	East	60,000
	Electronics	West	60,000
	Industrial Products	Midwest	60,000
Intl. Securities	Banking	East	60,000
Acquisitions	Financial Services	West	60,000
	Banking	East	60,000
	Manufacturing	East	60,000
Depositor Rel.	Banking	Southwest	60,000
	Banking	Midwest	60,000
	Real Estate	West	60,000
Foreign Exchange	Banking	West	60,000
Priv. Placements	Banking	West	60,000
Regional	Financial Services	West	55,300
Equities	Insurance	Southwest	55,000
Regional	Banking	East	55,000
	Banking	West	55,000
	Banking	East	55,000
	Real Estate	West	55,000
	Banking	Southeast	55,000
	Banking	West	55,000
	Equipment	Midwest	55,000
Product Man.	Banking	Midwest	55,000
	Banking	Midwest	50,000
Trust	Banking	South	50,000
	Financial Services	Midwest	50,000
Marketing	Banking	East	50,000
	Banking	Midwest	50,000
	Banking	West	50,000
Acquisitions	Financial Services	West	50,000
Com. Lending	Banking	Southwest	50,000
	Banking	Northeast	50,000
	Communications	Midwest	50,000
Corp. Lending	Banking	Midwest	50,000
	Banking	East	$ 50,000
Trust	Banking	South	50,000
	Banking	West	50,000
Corporate	Banking	West	50,000
Fixed Income	Banking	East	50,000
	Financial Services	East	50,000
	Banking	East	45,000
Agribusiness	Banking	East	45,000
Bus. Services	Banking	East	45,000
	Petroleum	Southwest	45,000
	Banking	East	45,000
	Financial Services	East	45,000
	Banking	Midwest	40,000+
Corp. Lending	Banking	Midwest	40,000
Commercial Lending	Banking	Southwest	40,000
Assistant VP			
	Banking	East	100,000
	Banking	Northeast	60,000
	Banking	Northeast	55,000
	Banking	Northeast	50,000
Real Estate	Banking	West	45,000
	Banking	Northeast	45,000
	Banking	West	45,000
	Financial Services	Southwest	45,000
	Banking	East	45,000
	Banking	Midwest	45,000
Consumer Lending	Banking	East	40,000
Real Est. Lending	Banking	Midwest	40,000
	Banking	South	40,000
	Banking	West	40,000
Loan Officer	Banking	Northeast	40,000
Consumer Lending	Banking	East	40,000
Controller			
VP	Manufacturing	Midwest	150,000
	Broadcasting	East	140,000
	Energy	East	130,000
	Transportation	Midwest	100,000+
VP	Food	East	100,000
	Technology	East	90,000
Europe	Electronics	West	90,000
	Consulting	West	80,000
VP	Transportation	Northeast	75,000+
VP	Publishing	West	75,000
	Banking	Northeast	75,000
	Banking	Northeast	75,000
	Mining	West	75,000
	Real Estate	South	70,000+
	Manufacturing	East	70,000
	Hospital	Northeast	70,000
	Construction	Midwest	70,000
	Real Estate	Southeast	70,000
	Publishing	West	70,000
	Manufacturing	West	70,000
	Hospitality	West	62,000
VP	Banking	South	61,000
Assistant	Manufacturing	West	60,000+
	Retail	Midwest	60,000
	Industrial Products	West	60,000
	Instruments	East	60,000
	Legal	East	60,000
VP	Insurance	West	60,000

POSITION	INDUSTRY	LOCATION	SALARY
	Consumer Products	West	$ 57,000
	Manufacturing	Southwest	55,000+
Assistant	Pharmaceutical	Midwest	55,000
	Hospital	West	55,000
	Distribution	Southeast	55,000
	Sports	East	52,000
	Machinery	Midwest	50,000
	Electrical	Midwest	50,000
Assistant	Investment Banking	Midwest	50,000
	Capital Equipment	Southwest	50,000
	Electronics	West	50,000
	Energy	Southwest	50,000
	Machinery	Canada	50,000
	Banking	East	45,000
	Manufacturing	West	45,000
	Entertainment	West	45,000
	Construction	South	40,000
Treasurer			
	Real Estate	West	90,000
& Secretary	Manufacturing	West	80,000
	Recreation	East	75,000+
	Restaurant	Northeast	75,000
	Business Service	Midwest	60,000
	Energy	Midwest	55,000
	Energy	East	50,000
Assistant	Manufacturing	Southwest	49,000
Director			
Venture Man.	Manufacturing	Northeast	200,000
Administration	Financial Services	Northeast	150,000+
Research	Financial Services	West	150,000
Taxes	Chemical	Southwest	125,000
Inv. Banking	Financial Services	Northeast	100,000+
Audit	Manufacturing	Midwest	90,000
Taxes	Consumer Products	East	90,000
Taxes	Petroleum	Southwest	80,000
Fin. Operations	Electronics	Southwest	80,000
Fin. Reporting	Entertainment	West	75,000
Commodities	Financial Services	West	75,000
Fin. Planning	Consumer Products	East	75,000
	Manufacturing	Northeast	70,000+
Fin. Analysis	Industrial Products	South	70,000
Cost Improvement	Pharmaceutical	Midwest	70,000
	Real Estate	West	70,000
Fin. Planning	Manufacturing	West	70,000
	Glass Products	Midwest	70,000
Tax	Agriculture	Midwest	66,000
	Utility	Southwest	65,000
Corp. Development	Consumer Products	Northeast	65,000
Tax	Electronics	Midwest	60,000
Tax	Conglomerate	Midwest	60,000
	Insurance	West	55,000
	Service	West	50,000+
	Financial Services	West	50,000
Marketing	Banking	Midwest	50,000
	Metals	Northeast	45,000
	Banking	East	45,000
	Financial Services	Northeast	45,000
New Product Dev.	Financial Services	Northeast	40,000

POSITION	INDUSTRY	LOCATION	SALARY
Manager			
Org. Planning	Conglomerate	Far East	$140,000
	Investment	East	100,000
Syndication	Investment	Northeast	100,000
Investment	Finance	East	90,000
Tax	Financial Services	Northeast	80,000
Sales	Investment Banking	East	75,000
Fin. Reporting	Consumer Products	Southwest	75,000
Sales	Investment Banking	East	75,000
Actuary	Insurance	East	70,000
Marketing	Financial Services	West	65,000
Budget & Analysis	Manufacturing	Midwest	57,000
Regional	Financial Services	West	55,000
Tax	Manufacturing	West	55,000
Fixed Income Inv.	Chemical	East	55,000
Tax	Service	Northeast	54,000
Marketing	Financial Services	East	50,000
	Construction	West	50,000
Marketing	Financial Services	East	50,000
Marketing	Banking	East	50,000
Regional	Banking	West	50,000
	Financial Services	East	50,000
Office	Financial Services	South	50,000
	Banking	Southwest	50,000
	Banking	West	50,000
Marketing	Banking	East	50,000
Corp. Accounts	Banking	East	50,000
	Glass Products	Midwest	45,000
Marketing	Financial Services	East	45,000
	Investment	East	45,000
New Market Dev.	Banking	East	45,000
Accounting	Manufacturing	Midwest	40,000
	Financial Services	South	40,000
Capital Analysis	Manufacturing	Midwest	40,000
	Banking	South	40,000
Operations	Banking	West	40,000
Investments	Banking	South	40,000
Credit Review	Banking	West	40,000
	Financial Services	West	40,000
	Banking	West	40,000
Personal Assets	Financial Services	West	40,000
	Industrial Products	Northeast	40,000
	Publishing	Northwest	40,000
	Investment Banking	East	40,000
Officers			
Partner	Investment Banking	Northeast	250,000+
Chief Economist	Financial Services	East	150,000
Senior Staff	Venture Capital	East	150,000
Managing Dir.	Financial Services	East	150,000
Leasing	Financial Services	East	80,000
	Investment Banking	Northeast	80,000
Marketing	Banking	Southeast	70,000
Bank Relations	Financial Services	South	60,000
Investment	Real Estate	West	60,000
Calling	Banking	Midwest	50,000
Marketing	Financial Services	West	50,000
Com. Loans	Banking	Northeast	50,000
Group Credit	Financial Services	South	50,000
Calling	Banking	West	47,000+
Credit	Banking	South	40,000
Relationship	Banking	South	40,000

(continued)

POSITION	INDUSTRY	LOCATION	SALARY
Auditor			
Assistant	Insurance	East	$ 55,000
Assistant	Banking	Southwest	55,000
	Petroleum	Northeast	55,000
	Natural Resources	Northeast	55,000
	Petroleum	South	45,000
Associate	Financial Services	East	45,000
	Natural Resources	South	45,600
Miscellaneous			
Trader	Banking	East	125,000
Industrial Inv.	Real Estate	West	120,000
Associate	Banking	East	75,000
Tax Exempt Assoc.	Investment Banking	North	75,000
For. Ex. Trader	Banking	Northeast	60,000
Chief Dealer	Banking	Midwest	60,000
For. Ex. Trader	Financial Services	East	56,000
Corp. Economist	Financial Services	East	55,000
Chief Accountant	Consulting	West	55,000
Planning Coord.	Retail	Northeast	55,000
Account Exec.	Investment Banking	Midwest	45,000

MANUFACTURING

Vice President			
	Consumer Products	Southeast	135,000+
	Electrical	Northeast	130,000+
Technical Services	Electrical	East	120,000
	Transportation	West	100,000
Technical Services	Electrical	Midwest	100,000
Technical Services	Telecommunications	East	90,000
	Machinery	South	85,000+
	Electrical	Midwest	85,000
	Medical Products	East	80,000
	Foods	West	75,000+
	Furniture	Midwest	75,000
	Utility	Southeast	75,000
	Industrial Products	Midwest	70,000
	Paper	Canada	70,000
	Food	West	65,000
	Printing	Midwest	65,000
	Instrumentation	West	65,000
	Industrial Products	South	65,000
	Conglomerate	Midwest	60,000
	Jewelry	East	60,000
	Electronics	West	60,000
	Industrial Products	Midwest	55,000
	Manufacturing	Northeast	55,000
	Apparel	West	45,000
Director			
	Electronics	West	75,000
Plant	Metal Products	Midwest	70,000
Quality Assurance	Telecommunications	East	65,000
	Office Equipment	Midwest	60,000+
Plant	Food	East	58,000
	Telecommunications	East	55,000
	Chemical	Northeast	50,000
Materials	Aircraft	Southwest	50,000
Quality Control	Electronics	West	50,000
	Industrial Products	Midwest	50,000
	Industrial Products	Southeast	50,000
Materials	Metals	Midwest	50,000

Manager			
Plant	Electronics	Northeast	$130,000
	Communications	East	100,000
	Electronics	West	75,000
Technology	Construction	East	70,000
	Transportation	Midwest	66,000
Technical	Telecommunications	East	65,000
Quality Assurance	Energy	Southwest	65,000
	Machinery	Midwest	65,000
Plant	Pharmaceutical	Southeast	60,000
	Transportation	Midwest	57,000
Plant	Metals	Midwest	55,000
	Metals	Midwest	50,000+
Materials	Machinery	Midwest	50,000
Control	Electronics	East	50,000
Plant	Plastics	Southeast	45,000
	Food	Midwest	45,000
Operations	Food	Midwest	45,000
Quality Assurance	Instrumentation	West	45,000
Production Assur.	Electronics	West	45,000
	Manufacturing	Midwest	45,000
	Manufacturing	Southwest	42,000

MARKETING

Executive VP			
	Cosmetics	West	160,000
	Cement	Southeast	90,000
Senior VP			
	Industrial Products	Midwest	100,000
	Consumer Products	West	100,000
	Business Services	East	80,000
	Communications	Southeast	70,000
Vice President			
	Robotics	Midwest	150,000
	Retail	Northeast	135,000
	Manufacturing	East	120,000
Development	Restaurant	East	110,000
	Retail	Southwest	110,000
	Manufacturing	Midwest	100,000
	Consumer Products	West	100,000
	Energy	East	100,000
	Manufacturing	Midwest	100,000
	Food	Southwest	100,000
	Manufacturing	Midwest	90,000+
	Consumer Products	East	90,000
	Food	South	90,000
	Insurance	West	90,000
	Retail	Southwest	90,000
	Pharmaceutical	East	90,000
	Entertainment	East	90,000
	Food	Southwest	90,000
	Industrial Products	Midwest	85,000
	Electronics	East	85,000
	Electronics	East	84,000
	Manufacturing	East	80,000
	Retail	Souhwest	80,000
	Transportation	Southwest	80,000

(continued)

POSITION	INDUSTRY	LOCATION	SALARY
(Marketing VP cont.)			
	Manufacturing	East	$ 75,000
	Energy	Southwest	75,000
	Manufacturing	Midwest	75,000
	Computer	West	75,000
	Transportation	West	75,000
	Electronics	East	75,000
	Rubber	Midwest	75,000
	Machinery	Midwest	75,000
	Food	Midwest	75,000
	Pharmaceutical	East	75,000
	Shipping	East	70,000
	Manufacturing	Southwest	70,000
	Food	Southwest	70,000
	Industrial Products	Midwest	70,000
	Energy	Southwest	70,000
	Petrochemical	International	70,000
	Publishing	East	65,000
	Movie Equipment	Northeast	65,000
	Machinery	Midwest	65,000
	Leasing	Northeast	65,000
	Manufacturing	West	60,000+
	Entertainment	South	60,000
	Service	Midwest	60,000
	Insurance	East	60,000
	Consumer Products	West	60,000
	Food	Northwest	60,000
	Insurance	Southwest	60,000
	Transportation	Northeast	60,000
	Chemical	South	60,000
	Telecommunications	East	60,000
	Manufacturing	Southwest	60,000
	Instruments	West	60,000
	Electronics	Midwest	55,000
	Consumer Products	South	50,000
	Business Services	East	50,000
	Machinery	East	48,000+
	Steel	Midwest	45,000
	Electronics	East	45,000
	Publishing	South	42,000
	Industrial	Southeast	40,000
Director			
Small Systems	Electronics	East	125,000
	Transportation	West	100,000
	Electronics	East	95,000
	Electronics	West	80,000
	Pharmaceutical	East	80,000
	Manufacturing	East	78,000
	Industrial Products	Midwest	75,000
	Publishing	South	70,000+
	Industrial Products	Midwest	70,000
	Electronics	East	70,000
	Electronics	East	65,000
	Construction	West	65,000
	Machinery	Midwest	65,000
	Food	Southwest	62,000
South America	Electronics	West	60,000
	Consumer Products	West	60,000
	Manufacturing	Southeast	60,000
	Electronics	West	60,000
	Medical Equipment	Northeast	60,000
	Transportation	East	$ 60,000
	Equipment	West	60,000
	Manufacturing	West	60,000
	Service	East	60,000
	Electronics	West	60,000
Product Dev.	Manufacturing	East	60,000
	Health	Midwest	60,000
	Consumer Products	West	60,000
Adv. & Promotion	Transportation	East	60,000
	Communications	West	55,000
	Consumer Products	East	55,000
	Apparel	Northwest	55,000
	Insurance	Northeast	55,000
	Mining	Midwest	55,000
New Business	Chemical	Midwest	55,000
	Cosmetics	West	55,000
	Restaurant	Midwest	55,000
Development	Food	West	54,000
	Consumer Products	Northeast	54,000
	Consumer Products	Midwest	52,000
	Aluminum	Midwest	51,000
	Paper Products	Northwest	50,000
	Distribution	West	50,000
	Health Care	West	50,000
New Products	Consumer Products	West	50,000
	Consumer Products	West	50,000
	Industrial Products	Midwest	50,000
	Food	West	50,000
	Furniture	West	50,000
	Insurance	Northeast	45,000
	Communications	Northeast	45,000
	Food	Midwest	45,000
	Machinery	Midwest	45,000
Development	Manufacturing	Northeast	45,000
	Pharmaceutical	East	40,000
Manager			
	Apparel	South	100,000
Product	Telecommunications	East	100,000
	Industrial Products	Northeast	90,000
Regional	Data Processing	Northeast	85,000
National	Industrial Products	Southeast	75,000
Regional	Data Processing	South	75,000
	Real Estate	West	75,000
	Industrial Products	Northeast	70,000
	Manufacturing	East	70,000
	Food	East	65,000
	Electronics	East	60,000
	Electronics	West	60,000
Product	Electronics	West	60,000
	Electronics	Midwest	60,000
Product	Electronics	West	55,000
International	Lumber	West	55,000
Product	Insurance	East	55,000
Area	Instrumentation	Northeast	55,000
	Industrial Products	Midwest	55,000
	Electronics	West	50,000
Research	Food	Southwest	50,000
Merchandise	Retail	East	50,000
Development	Publishing	East	50,000
	Electronics	Northeast	50,000

(continued)

POSITION	INDUSTRY	LOCATION	SALARY
(Marketing Manager cont.)			
Development	Pharmaceutical	East	$ 45,000
	Electronics	West	45,000
Brand	Food	South	45,000
	Pharmaceutical	Northwest	45,000
	Service	Northwest	45,000
	Medical Products	East	45,000
Product	Communications	Southwest	45,000
	Medical Equipment	Canada	45,000
Product	Electronics	Midwest	40,000
Sr. Product	Communications	East	40,000
	Real Estate	Southwest	40,000
	Insurance	West	40,000
	Machinery	Midwest	40,000
	Auto	Southwest	40,000
	Consumer Products	Midwest	40,000

SALES

Vice President

	Machinery	Midwest	100,000+
	Food Equipment	East	100,000+
	Electronics	Midwest	100,000+
International	Coal	East	100,000
	Retail	East	100,000
	Consumer Products	East	100,000
	Real Estate	South	100,000
International	Consumer Products	South	100,000
	Office Equipment	East	100,000
	Electronics	East	100,000
	Insurance	East	94,000
Fountain	Consumer Products	South	90,000
	Electronics	Midwest	85,000
	Health Care	Northeast	65,000
	Electronics	Midwest	65,000
	Transportation	West	61,000
	Mining Equipment	Northeast	60,000
	Cosmetics	East	60,000
	Construction	Midwest	60,000
	Food	East	55,000
	Food	East	50,000
Cargo	Transportation	West	50,000
Assistant	Apparel	East	45,000

Manager

National	Consumer Products	East	125,000+
	Manufacturing	West	86,000
National	Electronics	East	85,000
National	Distribution	East	75,000
National	Consumer Products	East	70,000
Regional	Construction	East	70,000
Regional	Construction	Southwest	70,000
	Publishing	East	69,000
	Apparel	East	65,000
General	Printing	Northeast	60,000+
National	Chemical	Midwest	60,000
	Electronics	Northeast	60,000
	Real Estate	West	60,000
Senior Account	Food	Southwest	60,000
International	Electronics	Southwest	60,000
	Manufacturing	West	60,000
National	Manufacturing	Northeast	55,000+
	Furniture	West	55,000
General	Food	East	$ 55,000
	Metals	Southwest	52,000
	Chemical	Midwest	50,000
National	Consumer Products	West	50,000
Regional	Insurance	Northeast	50,000
	Machinery	Midwest	50,000
National	Consumer Products	East	50,000
	Recreation	East	50,000
General	Printing	Northeast	50,000
	Manufacturing	Canada	50,000
	Importer	Northeast	46,000
	Machinery	Northwest	45,000
Zone	Manufacturing	Midwest	45,000
	Paper	S. America	45,000
National	Chemical	South	45,000
Area	Machinery	East	43,000
	Manufacturing	Southwest	42,000
Regional	Consumer Products	West	40,000
Regional	Communications	Southwest	40,000
General	Industrial Products	Southwest	40,000
National	Food	South	40,000
National	Metal Products	South	40,000
	Industrial Products	East	40,000
	Consumer Products	East	40,000
	Medical Products	East	40,000
National	Mining	West	40,000
National	Electrical	East	40,000
	Electrical	Midwest	40,000

Director

	Computer Services	West	75,000
	Manufacturing	Midwest	65,000+
	Food	West	65,000
	Environmental	Midwest	60,000
	Chemical	East	60,000
Regional	Travel	Midwest	55,000
	Industrial Products	Midwest	55,000
	Metals	South	50,000+
	Food	Southwest	50,000
Exports	Consumer Products	East	45,000+
National	Chemical	Midwest	45,000
	Electronics	West	45,000
	Transportation	South	40,000
	Medical Products	Canada	40,000

Sales Executive

	Industrial	East	90,000

PERSONNEL

Senior VP

	Banking	Midwest	160,000
	Real Estate	Southwest	130,000

Vice President

	Chemical	Southwest	150,000+
	Energy	Southwest	150,000
	Utility	Southeast	120,000
	Service	East	110,000
	Paper	East	110,000
	Food	East	100,000
	Manufacturing	Midwest	100,000

POSITION	INDUSTRY	LOCATION	SALARY
Compensation	Manufacturing	East	$100,000
	Banking	Midwest	95,000
	Energy	East	90,000
	Diversified	Midwest	80,000
	Retail	East	75,000
	Food	Midwest	70,000+
	Real Estate	West	70,000
	Consumer Products	Midwest	70,000
	Chemical	West	70,000
	Insurance	Northeast	70,000
	Paper	East	65,000
	Metals	East	65,000
	Distribution	Northwest	60,000+
Labor Relations	Energy	Southwest	60,000+
	Manufacturing	Southeast	60,000
	Insurance	Northeast	56,000
	Service	West	50,000
	Manufacturing	East	45,000+
	Consumer Products	West	45,000
Director			
	Consumer Products	East	85,000
	Holding Company	West	80,000
Compensation	Consumer Products	East	80,000
	Consumer Products	East	80,000
Training	Forest Products	East	70,000
	Mining	West	65,000
	Insurance	East	61,000
	Consumer Products	Northeast	60,000
Compensation	Energy	Midwest	60,000
	Retail	East	60,000
	Pharmaceutical	East	60,000
Planning	Manufacturing	East	50,000+
	Manufacturing	East	50,000+
Employee Rel.	Transportation	Northeast	50,000
	Textile	Southeast	50,000
Training	Consumer Products	East	50,000
	Retail	Southwest	50,000
	Electronics	Northeast	50,000
	Transportation	Midwest	50,000
	Food	West	50,000
	Machinery	Southwest	48,000
Training	Financial Services	West	45,000
	Real Estate	South	45,000
	Manufacturing	West	45,000
	Banking	Southeast	42,000
	Manufacturing	West	42,000
	Machinery	Midwest	40,000
Manager			
	Chemical	East	60,000
	Electronics	West	60,000
	Mining	West	60,000
Management Dev.	Manufacturing	Midwest	60,000
Compensation	Retail	Southwest	54,000
	Food	Midwest	50,000
	Food	Southwest	50,000
	Food	East	50,000
Training	Industrial Products	Midwest	50,000
	Pharmaceutical	East	50,000
	Paper	East	50,000
	Energy	Northeast	45,000
	Food	Northeast	$ 45,000
	Manufacturing	West	45,000
	Banking	West	40,000
Training	Distribution	Midwest	40,000
Training	Chemical	Midwest	40,000

PLANNING

Vice President			
	Chemical	Northeast	175,000+
	Agriculture	Int'l.	140,000
	Manufacturing	West	130,000
	Chemical	Northeast	125,000+
	Mining	West	100,000
	Consumer Products	East	100,000
	Broadcasting	East	85,000
	Insurance	West	85,000
	Auto Products	Northeast	75,000
	Chemical	South	70,000
	Health Care	Southeast	65,000
	Lumber	Midwest	65,000
	Banking	Southeast	60,000
	Banking	Southeast	60,000
	Health Care	East	50,000
	Equipment	East	50,000
Director			
International	Food	East	75,000
	Entertainment	Northeast	75,000
	Real Estate	West	65,000
	Industrial Products	Midwest	65,000
	Conglomerate	Northeast	60,000
	Petroleum	East	60,000
Manager			
	Diversified	East	65,000
Dental Products	Health Care	Midwest	40,000
Senior Executive			
	Consumer Products	Northeast	70,000
	Metals	East	60,000+

PURCHASING

Vice President			
	Plastics	Southeast	75,000
	Metal Products	Northeast	60,000
	Construction	West	60,000
Director			
	Consumer Products	East	70,000
	Metals	East	65,000
	Travel	West	60,000
Manager			
	Manufacturing	Midwest	50,000
	Distribution	West	50,000
Buyer			
Senior	Meat	East	65,000
Estimator	Energy	Southwest	54,000
Food	Consumer Products	East	50,000

(continued)

PUBLIC RELATIONS

POSITION	INDUSTRY	LOCATION	SALARY
Vice President			
	Manufacturing	Southwest	$100,000
	Real Estate	Southwest	100,000
	Utility	Southeast	85,000
	Metals	West	70,000
	Retail	Midwest	60,000+
Director			
Communications	Chemical	East	110,000
	Manufacturing	East	100,000
	Petroleum	East	70,000
Issues Man.	Chemical	East	60,000
	Entertainment	East	45,000
Manager			
Communications	Manufacturing	West	52,000
Investor Rel.	Energy	Midwest	50,000

LEGAL

POSITION	INDUSTRY	LOCATION	SALARY
General Counsel			
VP	Machinery	Midwest	200,000
VP & Secretary	Paper	East	160,000
VP	Consumer Products	West	150,000
	Insurance	East	150,000
	Consumer Products	West	115,000
VP	Electronics	West	100,000
	Publishing	West	100,000
VP	Energy	West	80,000
	Insurance	East	80,000
	Telecommunications	East	60,000
	Utility	South	50,000+
Assistant	Legal	West	50,000
Assistant	Conglomerate	West	50,000
Associate	Mining	Midwest	50,000
Assistant	Conglomerate	West	40,000
Partner			
Senior	Legal	Northeast	200,000+
	Legal	West	135,000
Manager			
Administrator	Legal	Northeast	60,000
	Bank	Midwest	48,000
Director			
	Environmental	Northeast	84,000
Attorney			
International	Pharmaceutical	East	100,000
	Consumer Products	East	90,000
Senior Assoc.	Consumer Products	Midwest	75,000+
	Manufacturing	Midwest	65,000+
	Manufacturing	Midwest	65,000
	Coal	Northeast	60,000+
	Manufacturing	Midwest	55,000
	Legal	West	50,000
	Engineering	Midwest	50,000
	Mining	Midwest	50,000
International	Consumer Products	South	50,000
	Food	Southeast	45,000
	Energy	Midwest	45,000
	Mining	Northeast	40,000

RESEARCH & DEVELOPMENT

POSITION	INDUSTRY	LOCATION	SALARY
Vice President			
	Pharmaceutical	Midwest	$175,000
	Industrial Products	Midwest	150,000
	Medical Devices	Midwest	85,000
	Pharmaceutical	Northeast	75,000
	Pharmaceutical	Southeast	50,000
	Electronics	Southwest	45,000
Director			
	Genetic Engineer.	Northeast	100,000+
	Pharmaceutical	East	100,000
	Diversified	East	100,000
	Food	Northeast	75,000
	Pharmaceutical	East	65,000
	Manufacturing	Midwest	65,000
	Food	Midwest	60,000
Technology	Food	East	60,000
New Products	Medical Instruments	Southwest	60,000
	Food	Midwest	55,000
	Industrial Products	Midwest	55,000
	Pharmaceutical	East	50,000
Manager			
	Manufacturing	Midwest	70,000
	Energy	Southwest	62,000
Product Dev.	Manufacturing	East	55,000
	Pharmaceutical	Southeast	40,000
	Food	Midwest	40,000
Scientist			
	Consumer Products	East	80,000

DATA PROCESSING

POSITION	INDUSTRY	LOCATION	SALARY
Vice President			
Senior	Banking	Midwest	150,000
MIS	Retail	Midwest	125,000
	Financial Services	East	110,000
MIS	Manufacturing	Midwest	100,000
MIS	Service	Northeast	80,000+
Ex. VP	Banking	Northeast	75,000
MIS	Financial Services	Southwest	70,000
MIS	Transportation	Northeast	60,000+
Regional	Data Processing	South	60,000
	Insurance	Southwest	60,000
	Publishing	West	50,000
Director			
	Natural Resources	East	100,000+
	Publishing	East	95,000
MIS	Banking	East	80,000
Software	Computer Service	East	70,000
MIS	Real Estate	West	65,000+
MIS	Transportation	Southwest	65,000
	Construction	Southeast	60,000
	Agriculture	West	55,000
Programming	Health Care	West	55,000
	Hotel	Northeast	55,000
	Distribution	East	50,000
Hardware	Electronics	East	50,000

(continued)

POSITION	INDUSTRY	LOCATION	SALARY

(Data Processing cont.)

Manager

	Hospital	West	$ 75,000
	Chemical	East	65,000
	Natural Resources	Northeast	55,000
MIS	Petroleum	Southwest	55,000
Development	Electronics	West	50,000
	Auto	Midwest	40,000+

RESOURCES SPECIALISTS

Senior VP

Exploration	Energy	Southwest	105,000

Vice President

Operations	Coal	S. America	100,000
Exploration	Mining	West	80,000
Operations	Coal	East	80,000

Director

Development	Metals	Southwest	80,000
Operations	Metals	Northeast	70,000
	Energy	West	70,000

Manager

Exploration	Petroleum	Caribbean	90,000+
	Mining	East	90,000
New Ventures	Energy	Southwest	80,000+
Exploration	Coal	Southeast	80,000
Minerals	Coal	East	80,000
Exploration	Energy	Southwest	80,000
	Energy	Southwest	75,000
	Coal	East	70,000
Supply	Coal	East	60,000+
Mine Operations	Coal	S. America	60,000
	Coal	Northeast	60,000
Regional	Energy	Caribbean	55,000
Regional	Energy	East	50,000
Mine Operations	Metals	West	50,000
	Minerals	East	50,000
Production	Metals	South	45,000
Maintenance	Coal	East	45,000
Plant	Alloys	Northeast	45,000

Miscellaneous

Contractor	Petroleum	Southwest	100,000
Geologist	Energy	Southwest	60,000
Superintendent	Coal	East	50,000

ENGINEERING

Vice President

	Industrial Products	South	100,000
	Computer	West	85,000
	Construction	Southeast	80,000
	Instruments	East	80,000
	Electronics	East	80,000
	Paint	Midwest	75,000+
	Manufacturing	Northeast	74,000
	Computer	West	70,000
	Construction	Midwest	65,000
	Industrial Products	West	65,000
	Manufacturing	Midwest	60,000+
	Instruments	East	60,000
	Plastics	Northeast	60,000
	Food	Midwest	45,000

Director

Technical	Manufacturing	Midwest	$ 90,000
	Industrial Products	West	75,000
	Health Care	Midwest	75,000
	Petroleum	East	70,000
	Electronics	East	70,000
Services	Office Equipment	East	70,000
	Electronics	Northeast	70,000
	Electronics	Northeast	65,000
	Electronics	West	65,000
	Electronics	West	60,000
	Coal	East	55,000
	Consumer Products	East	55,000
	Electronics	West	55,000
	Food	Midwest	50,000+
	Industrial Products	West	50,000
	Machinery	Midwest	50,000
Process	Food	Midwest	50,000
	Food	Midwest	50,000
	Machinery	Midwest	45,000
	Electronics	Southwest	45,000
	Electronics	Midwest	45,000
	Electronics	South	45,000

Manager

	Electronics	East	102,000
	Construction	Southwest	80,000
	Construction	Northeast	80,000
	Computer	West	80,000
	Coal	Northeast	80,000
	Mining	Northeast	80,000
	Mining	West	80,000
	Coal	S. America	80,000
	Electronics	Canada	60,000
	Electronics	West	51,000
	Machinery	West	50,000
	Industrial Products	Canada	50,000
	Auto Parts	Northeast	46,000
	Construction	South	45,000
	Communications	Midwest	45,000
	Construction	West	45,000
	Electronics	East	45,000
	Industrial Products	East	45,000
	Metals	West	45,000
	Transportation	Midwest	45,000
	Metals	Northeast	45,000
	Mining Equipment	East	45,000
	Energy	Southwest	45,000
	Petroleum	Southwest	40,000
	Textile	South	40,000
	Apparel	South	40,000
	Manufacturing	South	40,000
	Manufacturing	Midwest	40,000

Chief Engineer

	Energy	Southwest	85,000
	Communications	East	55,000

(continued)

NON-INDUSTRY

POSITION	INDUSTRY	LOCATION	SALARY
President			
	Trade Association	East	$ 90,000
	Trade Association	East	80,000
Executive VP			
	Association	East	115,000
	Association	East	80,000
	Education	Northeast	60,000
Vice President			
Investment Off.	Nonprofit	East	100,000
Marketing	Consulting	East	90,000
	Nonprofit	West	75,000
	Trade Association	Northwest	75,000
	Health Services	Midwest	70,000
Nursing	Health Services	East	60,000
Executive Director			
	Government	Midwest	100,000
	Health Services	West	65,000
	Local Government	East	60,000
	Health Services	West	45,000
Director			
	Consulting	East	90,000
	Association	Midwest	80,000
	Education	South	65,000
Operations	Trade Association	Northwest	61,000
Public Works	Local Government	West	55,000
Sewer District	Local Government	West	$ 55,000
Social Services	Local Government	West	55,000
Development	Nonprofit	East	51,000
Housing	Local Government	West	50,000
Development	Health Care	East	50,000
Development	Nonprofit	West	45,000
Automation	Association	Midwest	40,000
Development	Education	Northeast	40,000
	Association	Northeast	40,000
Manager			
General	Trade Association	Northwest	125,000
City	Local Government	Southwest	90,000
General	Nonprofit	West	75,000
City	Local Government	West	60,000
Asst. General	Local Government	West	60,000
City	Local Government	South	50,000
General Project	Local Government	East	45,000
Branch	Health Services	Southwest	40,000
Administrator			
County	Local Government	Midwest	60,000
Hospital	Local Government	West	51,000
Miscellaneous			
Consultant	Education	Midwest	125,000
General Counsel	Nonprofit	West	100,000
Dean	Medical School	East	80,000+
Police Chief	Local Government	Midwest	55,000
Redevel. Officer	Local Government	West	55,000
Attorney	Local Government	West	55,000
Attorney	Local Government	West	50,000
Attorney	Association	Midwest	40,000

FIRMS PARTICIPATING IN JOB SURVEY

Battalia, Lotz & Associates, Inc.
342 Madison Ave., New York, N.Y. 10017

Billington, Fox & Ellis, Inc.
20 N. Wacker Drive, Chicago, Ill. 60606

Boyden Associates, Inc.
260 Madison Ave., New York, N.Y. 10016

Canny, Bowen, Inc.
425 Park Ave., New York, N.Y. 10022

William H. Clark Associates, Inc.
330 Madison Ave., New York, N.Y. 10017

DeVoto & Berry Partners, Ltd.
120 S. Riverside Plaza, Chicago, Ill. 60606

Eastman & Beaudine, Inc.
111 West Monroe St., Chicago, Ill. 60603

Handy Associates, Inc.
245 Park Ave., New York, N.Y. 10017

Ward Howell International, Inc.
99 Park Ave., New York, N.Y. 10016

A.T. Kearney, Inc.
222 S. Riverside Plaza, Chicago, Ill. 60606

Korn/Ferry International
1900 Ave. of the Stars, Los Angeles, Calif. 90067

Kremple & Meade
1900 Ave. of the Stars, Los Angeles, Calif. 90067

F.R. Schwab & Associates, Inc.
645 Madison Ave., New York, N.Y. 10022

William Stack Associates, Inc.
230 Park Ave., New York, N.Y. 10017

Paul Stafford Associates, Ltd.
45 Rockefeller Plaza, New York, N.Y. 10020

Staub, Warmbold & Associates
655 Third Ave., New York, N.Y. 10017

Spencer Stuart & Associates
437 Madison Ave., New York, N.Y. 10022

William H. Willis, Inc.
445 Park Ave., New York, N.Y. 10022

Wytmar & Co., Inc.
10 S. Riverside Plaza, Chicago, Ill. 60606

Arthur Young & Co.
277 Park Ave., New York, N.Y. 10017

The Ratios

Dun & Bradstreet greatly expands its compilation of business ratios, introduces other changes.

The vital ratios of business reported on the following six pages cover far more ground than ever before. They reflect a vast expansion in the number of ratios now compiled annually by Dun & Bradstreet's statisticians and computers—the most extensive data bank of the sort available anywhere.

In addition to broader coverage, there are several other changes in the ratios. First, the three traditional categories—retailing, wholesaling and manufacturing—are supplemented by three new ones: agriculture, mining and construction; services; and transportation, communication and utilities.

Moreover, substitutions have been made in some of the ratios themselves, in response to market surveys to determine which figures are of widest interest. Dropped from the tabulation are net profits on net working capital, net sales to tangible net worth, inventory to net working capital and funded debts to net working capital. Replacing them are the quick ratio—that is, cash and accounts receivable divided by current liabilities, total assets to net sales, accounts payable to net sales and return on total assets.

In another improvement, the ratios are listed in more logical order than in the past. The first six now measure solvency; the next five, efficiency; and the last three, profitability.

Finally, in each vertical column of three figures, representing the upper quartile, median and lower quartile in each Standard Industry Classification, the numbers now reflect a judgmental ranking. The upper quartile, for instance, represents the best achievement in any given ratio, not necessarily the highest number.

For reasons of space, what follows is only a small sampling of the data from 109 selected lines of business. A more complete tabulation is available in a free pamphlet on the Key Business Ratios just published by Dun's Financial Profiles, a unit of Dun & Bradstreet, Inc. 99 Church Street, New York, N.Y. 10007. The unit plans to sell still more detailed statistical compilations, based on figures from more than 800,000 companies in 900 lines of business, at prices of $250 and up.

How the Ratios Are Figured

To the economist and the statistician, terms like "median" and "quartile" are everyday working language, no more mysterious than "gross markup" to the retail-store proprietor. But though they involve precious dollars and cents, their precise meaning is foggy at best to many businessmen.

In the ratio tables, three figures appear under each ratio heading for each line. The center figure, in bold type, is the **median;** the figures immediately above and below the median are, respectively, the **upper** and **lower quartiles.** To understand their use, the executive must also know how they are calculated.

First year-end financial statements from concerns covered by the survey are analyzed by **Dun & Bradstreet** statisticians, who calculate each ratio individually for each concern in the sample.

The individual ratio figures, entered on data-processing cards and segregated by line of business, are then arranged with the best ratio figure at the top, the poorest at the bottom. The figure that falls just in the middle of this series becomes the **median** for the ratio in that line of business. The figure halfway between the median and the highest terms of the series is the **upper quartile;** the term halfway between the median and the bottom of the series is the **lower quartile.** In a strictly statistical sense, then, each median is the **typical ratio figure** for all the concerns studied in a given line.

Definitions of Terms

Collection Period—The number of days that the total of trade accounts and notes receivable, less reserves for bad debts, represents when compared with the annual net credit sales. Formula: divide the annual net credit sales by 365 days to obtain the average credit sales per day. Then divide the total of accounts and notes receivable by the average credit sales per day to obtain the average collection period.

Current Assets—Total of cash, accounts and notes receivable for the sale of merchandise in regular trade quarters, less any reserves for bad debts, advances on merchandise, inventory less any reserves, listed securities when not in excess of market, state and municipal bonds not in excess of market, and United States government securities.

Current Debt—Total of all liabilities due within one year from statement date including current payments on serial notes, mortgages, debentures or other funded debts. This item also includes current reserves, such as gross reserves for federal income and excess profit taxes, reserves for contingencies set up for specific purposes but does not include reserves for depreciation.

Fixed Assets—The sum of the cost value of land and the depreciated book values of buildings, leasehold improvements, fixtures, furniture, machinery, tools and equipment.

Inventory—The sum of raw material, material in process and finished merchandise. It does not include supplies.

Net Sales—The dollar volume of business transacted for 365 days net after deductions for returns, allowances and discounts from gross sales.

Net Working Capital—The excess of the current assets over the current debt.

Tangible Net Worth—The sum of all outstanding preferred or preference stocks (if any) and outstanding common stocks, surplus and undivided profits, less any intangible items in the assets, such as goodwill, trademarks, patents, copyrights, leaseholds, mailing list, treasury stock, organizational expenses, and underwriting discounts and expenses.

AGRICULTURE, CONSTRUCTION, MINING

Line of Business and no. of concerns reporting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net* sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
0111-0191	1.5	2.9	12.9	73.7	37.5	28.8	16.0	17.2	56.5	12.1	2.1	19.8	14.2	23.8
Agricultural Production—	**0.6**	**1.6**	**28.9**	**135.5**	**58.6**	**72.9**	**26.2**	**7.4**	**139.7**	**4.2**	**5.9**	**9.7**	**7.9**	**13.8**
Crops (106)	0.3	1.0	53.4	276.2	108.5	135.2	58.7	3.2	307.0	2.3	17.2	1.9	2.4	4.9
0211	1.1	1.9	51.9	107.7	98.6	39.9	13.5	27.4	38.3	40.7	1.9	3.1	7.0	14.8
Beef Cattle Feed Lots	**0.6**	**1.2**	**118.2**	**159.8**	**151.8**	**64.9**	**37.2**	**8.8**	**55.6**	**8.2**	**5.0**	**1.4**	**4.3**	**7.1**
(101)	0.3	1.0	309.8	332.6	384.2	118.8	60.1	3.6	88.8	4.8	8.2	(0.7)	(1.8)	(11.9)
1211	1.8	2.7	17.0	—	31.9	44.6	21.1	—	45.9	12.4	3.0	15.6	13.9	31.6
Bituminous Coal &	**0.9**	**1.5**	**40.5**	—	**90.2**	**89.4**	**35.7**	—	**83.0**	**6.9**	**5.3**	**8.5**	**5.4**	**13.8**
Lignite (171)	0.6	0.8	96.0	—	209.5	143.2	51.8	—	137.1	3.8	7.4	1.9	0.4	0.8
1751	3.3	5.1	11.0	—	21.3	10.5	—	—	26.3	14.1	2.0	11.4	21.3	36.2
Carpentering (144)	**1.8**	**2.8**	**30.8**	—	**44.0**	**28.1**	—	—	**35.5**	**7.5**	**4.2**	**5.9**	**11.4**	**20.9**
	1.1	1.7	76.9	—	93.9	74.7	—	—	65.0	4.7	6.6	2.0	3.0	8.1
1771	2.7	4.0	17.0	—	33.8	23.6	—	—	29.6	17.1	2.3	11.5	18.6	40.1
Concrete Work (134)	**1.6**	**2.0**	**41.6**	—	**62.2**	**63.4**	—	—	**42.7**	**9.7**	**5.6**	**6.4**	**10.6**	**20.2**
	1.1	1.3	119.6	—	132.5	93.0	—	—	67.3	5.7	9.4	3.5	6.4	12.7
0724	1.9	2.9	16.8	—	28.0	38.7	9.8	—	42.0	22.8	1.4	20.4	22.2	35.5
Cotton Ginning (102)	**1.0**	**1.6**	**37.4**	—	**68.0**	**60.7**	**26.2**	—	**74.8**	**7.9**	**3.8**	**8.4**	**14.6**	**23.5**
	0.6	1.1	80.3	—	111.6	91.1	47.4	—	138.5	4.6	9.9	2.5	5.6	14.1
1311	1.5	3.5	9.8	—	15.5	12.7	—	—	109.8	10.8	2.9	30.9	23.1	40.1
Crude Petroleum & Natural	**0.9**	**1.4**	**27.2**	—	**58.5**	**47.2**	—	—	**171.6**	**3.9**	**10.7**	**17.8**	**11.3**	**24.1**
Gas Extraction (115)	0.7	1.0	102.2	—	150.7	100.9	—	—	263.1	2.2	31.9	9.2	5.4	10.8
0241	1.1	5.7	5.8	56.5	30.0	58.3	7.3	22.1	91.5	14.2	2.6	14.8	10.1	16.1
Dairy Farms (102)	**0.5**	**1.7**	**16.5**	**101.0**	**56.3**	**86.8**	**16.4**	**6.8**	**170.8**	**4.6**	**4.2**	**8.1**	**5.2**	**9.0**
	0.2	0.9	45.8	321.4	107.3	113.9	30.6	3.4	350.5	1.9	7.8	4.7	3.1	4.6
1381	1.7	2.3	19.7	—	26.0	53.3	—	—	59.1	24.1	6.0	17.1	19.0	42.3
Drilling Oil & Gas Wells	**1.0**	**1.4**	**50.5**	—	**82.7**	**107.1**	—	—	**105.3**	**7.4**	**9.0**	**11.1**	**10.2**	**27.4**
(112)	0.6	0.8	96.6	—	226.7	218.2	—	—	184.3	3.0	15.7	7.1	5.4	14.0
1731	2.7	4.6	17.5	—	24.5	12.2	—	—	31.0	9.3	2.2	10.0	18.8	28.3
Electrical Contractors	**1.9**	**2.8**	**37.7**	—	**43.1**	**25.2**	—	—	**42.7**	**5.4**	**4.2**	**5.6**	**10.7**	**14.6**
(107)	1.2	1.8	70.4	—	95.8	48.8	—	—	69.9	3.2	7.1	2.4	6.0	11.0
1794	2.2	2.8	15.3	—	21.1	73.6	—	—	50.0	17.3	1.5	11.8	17.9	29.5
Excavating & Foundation	**1.2**	**1.7**	**44.1**	—	**74.0**	**92.5**	—	—	**75.5**	**6.6**	**4.5**	**6.3**	**7.7**	**13.7**
Work (108)	0.7	1.0	81.0	—	141.0	122.5	—	—	149.9	3.3	8.6	2.3	4.3	7.5
1521	2.3	4.6	12.1	—	26.6	11.9	—	—	40.2	11.9	2.0	18.3	11.1	25.6
General Contractors—	**1.1**	**2.1**	**35.4**	—	**61.7**	**46.5**	—	—	**70.2**	**5.6**	**5.1**	**6.1**	**6.9**	**17.5**
Houses (105)	0.4	1.3	110.7	—	151.7	98.7	—	—	120.1	2.3	10.2	2.2	3.2	8.6
1541	1.9	2.6	39.9	—	56.9	14.4	—	—	26.2	19.4	3.9	7.0	16.9	31.8
Industrial	**1.3**	**1.7**	**84.9**	—	**107.9**	**29.9**	—	—	**33.6**	**11.2**	**7.7**	**3.0**	**8.3**	**21.0**
General Contractors—(104)	1.0	1.3	157.6	—	194.0	57.3	—	—	44.9	6.2	12.8	1.0	4.0	9.3
1611	1.9	2.3	31.6	—	44.9	39.1	—	—	33.5	17.2	2.8	7.6	14.0	28.9
Highway & Street	**1.2**	**1.6**	**55.6**	—	**89.0**	**69.3**	—	—	**46.5**	**8.6**	**4.9**	**3.9**	**9.1**	**16.8**
Construction (111)	0.8	1.2	100.9	—	155.6	107.5	—	—	70.1	5.5	8.6	2.1	4.0	9.4
1011-1099	2.7	6.0	7.7	117.0	13.6	23.2	20.8	18.7	94.1	6.0	3.5	22.7	12.2	19.9
Metal Mining (126)	**1.0**	**1.9**	**23.7**	**208.8**	**55.7**	**83.2**	**52.5**	**8.7**	**165.1**	**3.0**	**6.9**	**6.6**	**2.9**	**7.2**
	0.4	1.0	58.8	530.0	132.7	141.8	79.9	4.9	453.2	1.0	13.9	(15.7)	(8.2)	(12.8)
1382	2.2	6.3	9.1	—	11.4	11.1	—	—	99.1	8.6	4.5	19.9	9.1	22.3
Oil & Gas Field	**1.1**	**1.6**	**49.7**	—	**61.2**	**48.3**	—	—	**236.7**	**2.3**	**17.4**	**8.1**	**3.8**	**5.3**
Exploration Svcs. (131)	0.6	1.0	112.5	—	181.3	148.4	—	—	624.4	1.0	51.7	(16.8)	(3.1)	(5.1)
1721	3.9	5.6	14.2	—	16.9	15.4	—	—	32.7	8.3	1.7	15.7	23.4	39.4
Painting, Paper Hanging	**2.1**	**2.7**	**37.3**	—	**41.9**	**30.1**	—	—	**40.6**	**5.2**	**3.3**	**6.1**	**9.9**	**23.7**
& Decorating (110)	1.3	1.8	73.3	—	87.9	57.6	—	—	68.5	3.5	5.6	1.9	4.2	6.6
1711	4.0	4.2	21.1	—	32.5	18.5	—	—	27.2	10.5	2.8	8.9	16.7	35.1
Plumbing, Heating, (except	**1.7**	**2.3**	**49.4**	—	**73.0**	**32.9**	—	—	**33.7**	**8.1**	**5.7**	**5.2**	**10.2**	**19.9**
Electric) & Air Condition-	1.2	1.6	133.8	—	165.8	61.0	—	—	47.4	5.2	7.8	2.3	6.3	12.6
ing Contractors (107)														
0251-0259	1.3	2.9	16.3	67.3	39.5	56.1	12.7	21.5	35.6	24.0	2.1	3.7	5.7	14.4
Poultry & Eggs (120)	**0.5**	**1.6**	**46.0**	**143.9**	**95.6**	**90.9**	**18.2**	**9.4**	**56.6**	**8.9**	**3.9**	**1.3**	**2.7**	**8.2**
	0.3	1.1	115.8	245.8	168.1	139.9	27.7	6.2	123.2	4.4	7.2	(1.2)	(1.3)	(4.5)

—Ratio not computed. Necessary balance sheet items not present in this line of business. ( ) Loss

(continued)

COMMUNICATION, TRANSPORTATION, UTILITIES

e of Business d no. of concerns porting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
911 lectric Services (109)	1.2 0.8 0.5	2.7 1.7 1.1	12.0 18.8 34.7	— — —	117.5 193.9 374.3	130.4 199.6 302.5	21.1 33.5 43.8	— — —	150.0 199.6 254.6	20.1 8.6 5.8	5.9 7.6 9.6	8.9 5.9 3.0	4.4 2.9 1.5	11.8 8.1 4.8
712 reight Forwarding 124)	1.8 1.3 1.0	2.0 1.5 1.2	58.0 135.7 298.9	— — —	79.5 159.4 374.0	11.1 28.3 68.3	31.0 44.1 89.7	— — —	18.7 30.0 71.5	28.5 11.5 6.3	3.5 8.3 14.0	6.9 3.5 1.4	16.0 9.9 5.3	51.2 27.3 11.9
212 ccal Trucking Without torage (105)	2.9 1.0 0.5	3.7 1.5 1.0	10.6 39.7 77.1	— — —	26.5 71.1 151.9	46.5 88.0 150.0	20.8 33.2 58.7	— — —	40.2 54.6 99.0	25.9 10.8 5.3	1.5 3.2 6.7	10.5 7.0 2.1	16.7 7.8 3.3	27.4 14.8 4.8
832 adio Broadcasting 188)	4.2 1.8 1.0	6.0 2.2 1.3	6.5 17.9 43.8	— — —	13.6 43.7 117.0	28.2 62.2 103.4	40.8 54.7 70.8	— — —	65.2 98.5 166.1	10.7 5.5 3.6	1.2 2.8 5.6	17.2 9.4 3.5	14.7 9.2 2.9	21.0 13.8 5.2
3011-4013 Railroads (109)	1.3 0.8 0.6	2.1 1.3 1.1	23.5 41.8 68.9	— — —	48.3 96.1 180.4	88.4 137.9 195.3	— — —	— — —	131.7 168.1 232.8	15.2 5.0 2.6	7.1 16.0 33.0	19.6 8.0 3.8	11.2 5.5 2.6	19.2 11.9 4.8
4811 Telephone Communication (Wire or Radio) (117)	2.6 1.1 0.5	4.1 1.6 0.8	10.3 19.7 41.1	— — —	130.8 181.7 385.8	191.9 237.9 383.5	25.1 41.2 52.5	— — —	259.3 330.6 415.5	8.8 3.3 2.2	3.8 5.7 10.7	18.9 13.4 9.5	5.4 4.4 2.2	14.9 12.3 8.6

—Ratio not computed for lack of figures.

MANUFACTURING

Line of Business and no. of concerns reporting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
2873-2879 Agricultural Chemicals (95)	1.9 1.0 0.6	3.3 1.9 1.4	34.9 58.5 111.9	86.7 142.3 233.1	40.9 83.5 175.9	18.7 40.1 87.1	24.0 45.0 64.9	15.7 9.9 5.9	34.1 46.7 61.7	13.1 7.4 4.3	2.5 6.6 10.1	5.3 3.3 1.5	12.6 7.8 3.4	23.9 15.8 7.8
3724-3728 Aircraft Parts, Including Engines (111)	1.6 1.0 0.6	2.8 1.9 1.4	30.7 73.5 138.7	96.4 164.2 263.0	44.4 98.7 175.9	31.7 61.4 94.1	31.0 44.5 56.5	20.0 9.7 5.5	43.1 50.5 65.0	11.1 6.7 4.4	2.7 5.1 9.0	11.0 6.9 3.4	18.4 13.2 5.3	44.0 26.0 10.8
2051-2052 Bakery Products (113)	2.0 1.1 0.8	3.3 1.9 1.3	16.9 36.2 66.1	116.4 216.8 362.6	24.1 49.1 112.0	58.9 85.6 133.5	17.0 24.4 31.7	41.5 29.8 17.4	27.3 37.0 48.2	32.5 15.0 7.1	2.5 4.3 6.2	5.5 2.4 1.2	12.7 6.9 2.7	21.8 13.8 6.7
2082-2087 Beverages (140)	1.5 0.9 0.5	3.3 2.0 1.3	20.3 38.7 70.4	61.8 118.1 188.1	34.0 68.2 136.7	41.4 72.1 100.7	16.7 24.9 37.2	20.1 13.2 5.1	33.4 44.8 68.1	17.6 9.6 5.2	2.9 4.8 7.4	7.3 4.1 1.8	14.6 8.3 3.6	27.3 15.6 8.5
3312-3317 Blast Furnaces & Steel Mills (92)	1.3 1.0 0.7	3.0 2.1 1.6	33.2 52.9 111.1	78.5 104.4 171.7	52.2 120.5 192.0	51.5 75.9 115.7	36.2 48.3 53.8	13.5 7.5 4.7	38.2 58.8 74.1	10.7 5.7 4.2	4.4 6.4 9.0	5.9 4.0 2.4	8.9 6.5 4.1	17.8 13.6 7.3
2731-2732 Books (101)	1.9 1.2 0.7	4.2 2.7 1.8	20.4 42.2 90.0	57.1 98.0 167.8	30.0 69.4 150.5	5.6 20.1 45.4	32.1 48.5 81.3	14.1 7.3 3.6	45.0 62.7 97.7	6.8 3.7 2.4	2.6 6.0 10.6	12.6 8.7 2.8	14.8 9.3 5.4	20.7 13.5 7.6
3531-3537 Construction, Mining, Handling Machinery & Equipment (102)	1.6 1.1 0.6	3.3 2.3 1.6	34.4 53.7 96.7	61.8 94.3 163.8	42.3 76.2 121.9	14.6 30.9 54.0	33.9 48.3 69.6	10.9 6.8 4.5	36.3 51.6 66.7	7.4 5.1 3.2	3.1 4.9 8.0	7.3 5.5 3.8	15.0 10.6 6.2	34.4 19.8 13.8
2021-2026 Dairy Products (125)	1.2 1.0 0.7	2.0 1.4 1.2	52.0 84.6 149.4	133.7 228.8 434.2	64.3 114.7 205.0	43.7 68.2 92.4	18.9 26.4 32.8	55.0 26.9 13.9	18.6 23.1 33.2	41.3 19.1 12.5	3.7 5.6 7.7	2.8 1.2 0.5	9.5 5.2 1.1	23.1 11.1 3.1
3641-3648 Electric Lighting & Wiring Equipment (114)	2.0 1.3 0.9	3.8 2.7 1.8	25.9 44.9 83.6	56.1 89.7 141.9	31.5 62.2 111.4	15.5 28.5 55.0	41.9 50.9 63.5	9.7 6.2 4.5	39.0 50.7 69.5	7.3 5.1 3.3	2.5 5.0 8.3	9.5 5.0 2.7	13.6 9.2 3.9	23.0 15.3 9.6
3671-3679 Electronic Components & Accessories (108)	2.1 1.3 0.8	3.8 2.5 1.7	25.5 47.3 113.0	61.1 111.8 264.6	32.9 62.7 168.3	14.9 31.6 68.1	36.1 47.8 58.4	12.9 7.4 4.6	39.2 50.1 67.1	9.0 4.9 3.2	2.9 4.6 6.4	14.3 7.6 4.4	18.2 10.6 6.5	30.0 19.3 12.1

(continued)

MANUFACTURING

Line of Business and no. of concerns reporting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
3441-3449	2.1	3.5	24.8	72.8	32.6	22.4	31.7	15.1	35.1	11.2	2.5	7.3	14.3	33.2
Fabricated Structural	**1.1**	**2.0**	**59.9**	**136.8**	**73.5**	**37.3**	**43.8**	**9.3**	**45.1**	**6.6**	**5.6**	**5.3**	**11.1**	**21.6**
Metal (104)	0.8	1.5	124.7	215.8	152.5	78.9	56.5	5.9	57.2	4.4	9.5	3.1	7.3	14.4
3551	1.9	3.3	29.1	59.0	37.7	18.9	30.6	11.4	43.0	6.7	2.8	9.8	13.2	24.7
Food Products	**1.2**	**2.5**	**50.7**	**91.5**	**63.4**	**34.5**	**45.6**	**6.1**	**55.5**	**4.9**	**5.0**	**4.6**	**7.9**	**15.7**
Machinery (131)	0.7	1.7	91.8	167.4	136.5	63.3	63.1	4.0	80.8	3.1	7.7	2.8	4.0	8.0
3142-3149	1.9	3.6	32.2	58.9	42.3	13.0	42.7	8.3	35.7	7.7	3.9	6.1	12.3	25.7
Footwear, Except	**1.2**	**2.6**	**60.0**	**85.8**	**73.6**	**30.0**	**54.0**	**5.7**	**44.9**	**4.4**	**5.5**	**3.9**	**7.6**	**14.5**
Rubber (119)	0.8	1.8	112.7	128.9	141.8	40.2	66.7	4.3	55.7	3.3	8.5	1.5	4.0	8.0
2511-2519	2.0	3.9	27.6	55.6	31.3	19.7	18.2	13.2	29.0	10.9	2.5	6.1	13.5	25.9
Household	**1.1**	**2.5**	**46.9**	**83.6**	**71.3**	**35.9**	**34.1**	**9.4**	**42.2**	**6.9**	**3.7**	**3.0**	**7.0**	**13.3**
Furniture (116)	0.7	1.8	97.2	130.2	148.4	70.3	47.4	5.2	51.8	4.2	6.5	0.9	2.6	4.2
2812-2819	1.5	3.0	28.8	95.0	40.2	37.6	34.3	16.4	37.4	9.7	5.4	8.0	9.1	17.4
Industrial Inorganic	**1.1**	**2.1**	**52.2**	**141.9**	**84.1**	**64.9**	**49.2**	**10.1**	**56.6**	**6.9**	**8.1**	**3.8**	**6.1**	**12.8**
Chemicals (132)	0.6	1.5	93.7	266.3	152.9	101.4	66.0	6.4	75.2	4.8	12.2	1.8	3.3	5.8
3822-3829	1.8	3.2	32.8	69.8	41.5	14.2	52.5	9.2	46.3	6.6	4.3	8.2	14.7	28.8
Measuring & Controlling	**1.1**	**2.3**	**64.1**	**104.8**	**86.0**	**29.6**	**66.6**	**5.1**	**59.0**	**4.4**	**6.9**	**5.5**	**8.0**	**16.8**
Instruments (135)	0.7	1.6	112.7	156.6	142.5	49.6	86.1	4.0	72.7	3.0	11.4	2.2	3.5	6.9
2011-2017	2.1	4.2	20.4	89.2	33.3	31.9	12.7	44.2	14.0	31.0	0.9	2.9	11.6	25.7
Meat Products (113)	**1.3**	**2.2**	**47.0**	**144.8**	**71.8**	**57.9**	**17.8**	**29.0**	**19.2**	**15.3**	**1.8**	**1.5**	**6.5**	**13.9**
	0.8	1.6	118.0	221.5	177.2	82.6	24.8	16.3	28.9	11.0	3.2	0.6	2.4	4.8
2321-2329	1.6	3.5	39.9	63.5	43.4	5.5	23.3	10.8	27.8	8.3	3.3	5.5	10.2	23.3
Men's & Boys'	**1.0**	**2.4**	**80.9**	**99.8**	**97.2**	**11.8**	**43.8**	**6.3**	**42.1**	**5.2**	**6.4**	**3.0**	**5.1**	**11.4**
Apparel (114)	0.6	1.7	146.2	144.5	180.9	35.6	66.0	4.2	56.1	3.7	10.1	1.6	2.4	6.2
3462-3469	2.1	3.7	20.9	74.2	33.1	37.6	30.2	14.4	43.0	12.2	2.1	7.6	13.1	21.0
Metal Forgings &	**1.1**	**2.2**	**38.6**	**129.7**	**56.7**	**51.3**	**40.5**	**10.1**	**50.1**	**6.7**	**4.4**	**4.1**	**6.7**	**12.1**
Stampings (119)	0.8	1.5	78.9	205.5	127.7	98.3	48.3	7.2	65.6	4.2	8.1	2.0	4.1	6.7
3541-3549	2.3	4.0	18.9	88.8	22.8	28.1	36.1	61.2	39.8	8.4	1.6	12.7	16.2	32.7
Metalworking Machinery &	**1.3**	**2.3**	**43.2**	**174.3**	**58.1**	**57.4**	**47.4**	**15.6**	**56.7**	**5.6**	**3.1**	**6.5**	**10.7**	**18.1**
Equipment (107)	0.9	1.6	84.4	636.4	129.6	75.5	62.4	6.1	71.0	3.8	7.5	3.4	7.1	10.8
3714	2.0	4.0	22.6	54.2	35.5	27.9	30.6	9.1	39.3	7.2	3.2	10.2	11.9	25.7
Motor Vehicle Parts &	**1.3**	**2.7**	**41.0**	**86.4**	**72.3**	**55.1**	**39.0**	**7.3**	**54.0**	**5.3**	**4.8**	**4.0**	**5.5**	**12.0**
Accessories (121)	0.7	1.9	80.9	143.4	132.8	88.2	50.7	4.5	73.2	3.7	7.1	1.4	0.5	1.2
3572-3579	1.4	3.2	37.3	80.9	50.5	17.0	44.3	7.0	50.2	7.3	4.1	12.2	13.6	30.2
Office, Computing &	**1.0**	**2.1**	**69.9**	**114.6**	**102.2**	**36.5**	**65.3**	**5.3**	**67.4**	**4.2**	**7.2**	**6.6**	**9.4**	**17.4**
Accounting Machines (116)	0.7	1.5	167.8	169.9	206.3	59.7	94.4	3.5	97.3	2.6	12.1	2.9	3.7	7.8
2851	2.2	4.1	25.9	56.2	34.7	18.4	29.2	10.0	32.3	7.8	3.4	5.8	12.4	23.3
Paints & Allied	**1.4**	**2.8**	**45.6**	**84.9**	**63.2**	**34.1**	**36.5**	**8.0**	**40.7**	**5.5**	**5.3**	**3.4**	**8.7**	**12.4**
Products (109)	1.0	2.0	68.7	115.2	121.5	65.4	45.2	5.8	50.0	3.9	7.9	2.0	5.4	7.9
2651-2655	2.1	3.3	28.1	81.1	39.6	32.6	30.2	21.9	31.5	14.0	3.1	5.0	9.7	18.7
Paperboard Containers &	**1.3**	**2.1**	**56.3**	**146.8**	**99.6**	**58.3**	**41.5**	**13.1**	**43.8**	**8.8**	**4.8**	**3.4**	**7.0**	**12.5**
Boxes (115)	0.9	1.5	110.0	248.0	197.4	107.7	46.3	7.6	55.8	4.8	7.6	0.9	2.6	4.6
2911-2999	1.4	2.6	35.3	130.3	46.4	29.5	28.4	31.4	31.7	28.5	3.4	9.3	11.1	24.7
Petroleum Refining (120)	**0.9**	**1.5**	**63.4**	**210.9**	**99.7**	**69.9**	**38.3**	**15.0**	**47.0**	**12.3**	**7.3**	**4.6**	**7.7**	**19.4**
	0.6	1.2	115.0	391.8	177.0	134.0	50.4	9.2	74.7	4.8	12.9	1.9	4.3	12.1
2821-2824	1.9	3.4	28.7	94.1	32.1	29.4	42.6	12.7	34.1	10.7	3.5	8.3	14.1	23.2
Plastics, Material &	**1.3**	**2.2**	**47.7**	**141.3**	**77.0**	**63.3**	**52.2**	**9.7**	**49.0**	**6.5**	**6.7**	**4.6**	**9.1**	**16.4**
Resins (102)	0.8	1.4	117.4	209.8	173.1	102.2	63.0	7.0	68.8	3.8	9.7	2.3	4.6	10.8
2421	2.1	4.7	11.9	58.3	22.9	31.7	14.2	13.2	40.3	12.8	1.6	6.4	10.6	17.9
Sawmills & Planing	**0.9**	**2.4**	**30.2**	**94.9**	**63.2**	**67.9**	**20.4**	**8.0**	**57.9**	**6.4**	**2.6**	**4.3**	**7.1**	**10.7**
Mills (128)	0.3	1.3	84.6	173.2	150.0	108.9	29.5	5.0	84.2	3.4	4.8	1.6	3.3	6.2
3841-3843	1.8	4.0	26.0	67.4	35.5	15.7	43.4	9.3	44.9	7.4	5.1	8.5	12.1	24.3
Surgical, Medical &	**1.2**	**2.5**	**48.4**	**97.3**	**81.1**	**33.6**	**61.6**	**6.0**	**59.8**	**4.0**	**6.8**	**4.7**	**7.8**	**14.2**
Dental Instruments	0.8	1.6	116.9	164.5	153.9	54.2	75.9	3.7	81.6	2.7	10.1	2.4	3.4	7.6
& Supplies (119)														
2331-2339	1.5	2.7	35.4	112.0	59.7	3.3	23.7	16.4	25.1	14.8	4.3	3.2	10.4	31.4
Women's, Misses', and	**1.0**	**1.7**	**104.3**	**159.0**	**131.6**	**7.7**	**43.0**	**10.7**	**32.5**	**9.4**	**7.4**	**2.0**	**6.2**	**16.3**
Juniors' Outerwear (107)	0.7	1.4	207.3	237.6	235.9	18.6	62.6	7.3	43.5	5.6	10.5	0.5	1.2	3.8

RETAILING

Line of Business and no. of concerns reporting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
5531	2.5	7.2	12.7	22.1	25.7	13.1	—	7.9	35.2	8.6	3.0	8.7	11.2	21.5
Auto & Home Supply	**1.4**	**3.1**	**33.6**	**55.7**	**57.2**	**28.4**	**—**	**4.9**	**49.1**	**4.4**	**5.9**	**4.9**	**4.6**	**10.7**
Stores (105)	0.6	1.9	102.6	93.7	123.1	49.1	—	3.6	82.1	2.2	10.5	1.3	1.8	3.6
5611	2.5	11.4	7.0	15.7	8.6	5.4	—	5.6	49.6	5.4	3.1	15.6	14.0	24.9
Clothing & Furnishings	**1.1**	**4.8**	**20.3**	**38.7**	**30.7**	**19.7**	**—**	**3.4**	**67.4**	**2.6**	**5.3**	**7.1**	**6.6**	**8.1**
Men's & Boys' (105)	0.3	2.2	61.0	73.1	93.3	58.3	—	2.2	120.4	1.8	10.9	1.6	2.7	3.5
5311	2.2	5.1	20.0	34.4	33.3	8.3	—	6.9	35.7	7.9	1.8	5.7	11.8	21.4
Department Stores (102)	**1.0**	**3.1**	**45.0**	**60.3**	**61.5**	**20.6**	**—**	**4.7**	**44.4**	**4.6**	**4.3**	**2.6**	**5.9**	**11.2**
	0.5	2.1	79.5	87.7	137.0	48.3	—	3.8	59.6	3.0	6.4	1.0	2.9	5.0
5812	1.6	2.6	15.8	—	35.4	54.4	—	—	30.3	29.2	2.3	9.9	18.5	24.2
Eating Places (103)	**0.9**	**1.6**	**32.5**	**—**	**76.1**	**92.7**	**—**	**—**	**50.0**	**11.7**	**3.3**	**5.4**	**8.5**	**16.4**
	0.4	1.0	56.5	—	139.5	137.7	—	—	89.5	7.2	4.9	1.9	2.9	5.7
5651	2.4	8.8	8.0	17.5	15.0	7.2	—	5.4	39.3	4.5	2.7	14.3	17.5	22.4
Family Clothing	**0.9**	**4.5**	**22.1**	**32.4**	**35.0**	**16.8**	**—**	**3.6**	**60.1**	**3.3**	**3.9**	**8.1**	**10.9**	**15.6**
Stores (105)	0.4	2.7	38.3	58.5	67.7	39.0	—	2.8	113.6	2.0	8.0	3.5	8.9	12.2
5712	3.2	9.2	11.0	31.2	17.7	7.7	21.1	6.3	45.0	4.6	2.9	9.1	9.3	18.2
Furniture Stores (104)	**1.4**	**3.3**	**34.1**	**56.9**	**46.6**	**22.3**	**42.7**	**4.6**	**65.5**	**2.7**	**4.8**	**4.0**	**5.7**	**10.0**
	0.6	2.2	71.3	95.0	114.4	48.1	87.9	3.2	116.4	1.8	8.1	1.8	2.9	4.3
5541	1.7	3.5	15.5	75.5	23.9	15.8	—	50.1	15.7	27.3	1.2	5.8	17.4	29.7
Gasoline Service	**0.9**	**2.1**	**46.0**	**148.6**	**66.5**	**45.5**	**—**	**27.1**	**30.3**	**15.8**	**2.5**	**4.1**	**10.2**	**17.5**
Stations (108)	0.5	1.4	93.5	287.5	139.7	85.9	—	12.2	59.9	7.1	4.9	1.9	6.3	10.7
5947	2.8	8.9	5.3	19.4	14.1	15.7	—	6.3	42.6	6.2	2.0	14.6	16.8	24.4
Gift, Novelty & Souvenir	**1.0**	**3.9**	**14.8**	**42.6**	**35.2**	**45.3**	**—**	**3.7**	**67.7**	**3.3**	**4.1**	**7.2**	**8.7**	**14.6**
Shops (121)	0.4	1.9	51.6	86.4	96.1	74.4	—	2.4	160.1	1.8	8.0	2.3	5.1	6.0
5411	1.3	3.9	21.0	44.7	27.9	33.5	—	25.8	12.6	31.0	1.3	3.6	15.1	20.6
Grocery Stores (105)	**0.7**	**2.3**	**36.1**	**73.9**	**61.4**	**55.2**	**—**	**17.7**	**16.8**	**18.0**	**2.1**	**1.8**	**8.8**	**17.5**
	0.4	1.5	84.6	116.9	124.0	99.9	—	12.4	25.3	10.2	3.5	1.0	6.1	10.7
5251	2.8	8.4	9.7	19.6	14.3	6.5	—	5.7	39.6	5.0	2.7	7.6	11.6	17.2
Hardware Stores (109)	**1.4**	**5.1**	**20.5**	**30.6**	**38.0**	**16.6**	**—**	**4.0**	**54.0**	**3.2**	**4.8**	**4.2**	**7.5**	**12.0**
	0.6	2.7	45.2	54.2	82.6	34.4	—	2.6	67.9	2.3	6.7	2.0	4.8	7.2
5945	1.4	4.8	17.1	33.8	27.8	11.1	—	5.1	34.2	9.5	3.6	8.0	16.3	27.0
Hobby, Toy & Game	**0.5**	**2.8**	**40.7**	**56.5**	**59.6**	**22.9**	**—**	**3.9**	**43.1**	**4.9**	**6.7**	**4.1**	**9.7**	**15.1**
Shops (120)	0.3	1.6	97.9	79.9	123.2	57.9	—	2.8	66.2	3.3	12.6	2.1	4.1	8.3
5722-5732	1.9	5.6	13.7	36.4	18.2	15.2	—	6.1	35.0	7.9	2.4	7.7	10.7	21.4
Household Appliance, Radio	**0.9**	**2.8**	**30.8**	**67.7**	**48.6**	**36.2**	**—**	**4.6**	**56.1**	**4.7**	**5.9**	**4.2**	**6.3**	**11.5**
& Television Stores (109)	0.3	1.6	94.0	99.3	110.2	78.2	—	3.6	93.1	2.9	10.9	1.8	3.3	6.0
5944	1.5	5.9	19.8	25.1	27.0	4.6	14.2	2.9	57.9	3.2	3.6	15.6	16.2	27.0
Jewelry Stores (101)	**0.8**	**3.6**	**35.9**	**41.2**	**44.5**	**13.5**	**32.4**	**2.3**	**79.5**	**2.2**	**9.2**	**8.0**	**10.2**	**16.6**
	0.5	2.2	74.5	74.1	88.3	27.6	56.5	1.5	107.1	1.6	15.5	4.6	6.4	11.6
5211	2.7	6.7	13.5	27.5	15.8	6.1	28.4	9.2	32.7	6.6	3.1	5.8	12.2	22.1
Lumber & Other Building	**1.3**	**2.8**	**36.5**	**73.3**	**54.3**	**17.6**	**40.1**	**6.2**	**42.9**	**4.7**	**4.9**	**2.9**	**8.9**	**13.6**
Materials Dealers (105)	0.8	1.9	80.2	119.5	106.7	32.3	54.3	4.0	61.2	2.8	7.8	1.5	4.1	5.6
5511	0.5	1.9	82.7	71.9	84.8	9.6	—	8.8	21.5	23.6	0.5	2.4	9.7	18.8
Motor Vehicle Dealers	**0.3**	**1.5**	**175.4**	**86.5**	**182.9**	**20.1**	**—**	**6.1**	**27.0**	**14.2**	**0.9**	**1.0**	**3.6**	**10.8**
(New & Used) (106)	0.2	1.3	325.3	101.7	349.5	33.7	—	4.7	32.0	9.5	1.4	(0.1)	(0.2)	(0.5)
5949	1.4	6.7	7.5	21.0	16.0	8.4	—	4.3	43.4	5.0	3.5	11.9	12.5	17.2
Sewing, Needlework, &	**0.5**	**3.8**	**20.8**	**39.2**	**35.0**	**31.7**	**—**	**3.3**	**66.2**	**3.4**	**5.8**	**5.1**	**6.8**	**9.4**
Piece Goods Stores (127)	0.2	2.2	50.5	60.6	71.0	59.7	—	2.2	193.2	2.0	9.6	2.1	3.0	6.0
5661	1.5	6.4	11.7	23.4	20.8	5.2	—	4.9	41.0	5.4	3.5	11.6	9.4	17.7
Shoe Stores (107)	**0.6**	**3.2**	**31.4**	**45.8**	**45.4**	**19.4**	**—**	**3.2**	**55.0**	**3.1**	**6.1**	**4.7**	**6.5**	**10.8**
	0.2	2.2	74.6	64.8	98.8	47.4	—	2.3	90.1	2.1	9.8	2.6	3.9	6.0
5941	1.4	6.8	9.8	23.1	20.7	8.7	—	4.8	42.0	5.5	3.3	8.2	14.0	22.7
Sporting Goods Stores &	**0.5**	**3.4**	**26.8**	**48.0**	**44.4**	**19.0**	**—**	**3.3**	**59.7**	**3.6**	**5.4**	**4.7**	**8.7**	**15.6**
Bicycle Shops (109)	0.2	2.0	75.6	68.7	100.7	48.4	—	2.5	96.2	2.2	10.4	2.3	4.9	6.2
5621	2.3	6.0	7.3	30.9	15.2	11.4	—	7.8	40.5	6.3	3.3	11.2	11.5	17.9
Women's Ready-to-Wear	**1.2**	**3.4**	**25.5**	**60.6**	**32.9**	**25.8**	**—**	**5.0**	**69.0**	**3.7**	**5.2**	**5.2**	**6.4**	**10.1**
Stores (105)	0.6	2.1	58.2	95.7	74.0	48.0	—	3.5	135.8	2.0	8.2	1.4	2.4	3.6

—Ratio not computed. ( ) Indicates loss.

(continued)

SERVICES

Line of Business and no. of concerns reporting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
7311-7319	2.2	2.8	35.9	—	46.8	9.2	21.5	—	17.4	25.1	2.5	10.9	20.8	44.5
Advertising (107)	**1.3**	**1.8**	**81.5**	—	**92.2**	**21.8**	**39.7**	—	**26.3**	**12.7**	**6.0**	**4.1**	**8.8**	**20.5**
	0.9	1.2	196.1	—	226.3	55.5	51.8	—	65.2	5.8	9.3	1.5	4.8	13.0
7512-7519	1.3	2.5	20.9	—	73.1	20.9	20.0	—	112.4	14.6	0.6	19.0	11.3	26.4
Automotive Rental & Leasing (114)	**0.7**	**1.1**	**78.8**	—	**249.2**	**84.1**	**40.5**	—	**172.3**	**6.9**	**3.3**	**6.2**	**5.0**	**14.9**
	0.3	0.6	214.7	—	532.1	268.2	68.2	—	287.7	1.8	8.6	2.4	2.0	7.3
7538	2.3	4.9	7.4	—	18.9	28.6	13.5	—	33.7	11.6	2.1	15.4	15.0	27.5
Automotive Repair Shops (129)	**1.3**	**2.7**	**26.4**	—	**41.7**	**54.3**	**29.2**	—	**56.6**	**7.2**	**3.6**	**6.0**	**9.7**	**14.8**
	0.6	1.6	63.5	—	93.0	89.0	40.1	—	106.3	4.6	5.7	2.6	5.2	7.6
7372-7374	2.6	3.7	26.4	—	34.4	10.3	38.3	—	38.8	13.5	2.3	12.7	19.1	45.0
Computer & Data Processing Services (109)	**1.4**	**1.8**	**50.2**	—	**79.3**	**35.1**	**55.1**	—	**47.4**	**7.2**	**4.3**	**7.0**	**11.0**	**26.6**
	0.7	1.1	151.6	—	186.3	81.8	80.8	—	77.3	3.8	8.4	2.9	6.2	14.4
7216	4.3	6.9	4.1	—	9.8	40.9	—	—	29.7	15.8	1.0	13.4	15.7	22.3
Dry Cleaning Plants, Except Rug Cleaning (118)	**1.9**	**3.5**	**12.5**	—	**22.5**	**74.7**	—	—	**46.9**	**9.6**	**1.8**	**6.8**	**10.1**	**13.9**
	1.0	1.6	28.2	—	47.4	94.9	—	—	91.9	4.3	3.0	3.4	6.0	8.2
8911	3.0	3.9	16.9	—	22.4	17.0	46.3	—	32.8	10.0	1.6	20.2	21.2	47.6
Engineering & Surveying Services (100)	**1.9**	**2.2**	**52.4**	—	**58.8**	**30.0**	**62.0**	—	**46.8**	**6.1**	**2.9**	**8.3**	**16.0**	**31.3**
	1.1	1.7	91.8	—	110.8	61.6	111.3	—	64.8	3.9	7.1	3.0	10.4	17.1
8062	2.6	3.6	12.1	—	27.3	65.5	50.0	—	84.3	12.4	3.0	6.1	6.0	12.8
General Medical & Surgical Hospitals (104)	**1.6**	**2.2**	**20.3**	—	**77.2**	**92.5**	**58.0**	—	**104.3**	**7.9**	**4.1**	**4.6**	**3.5**	**5.5**
	1.2	1.6	35.8	—	149.5	155.3	67.8	—	144.1	4.3	7.5	1.7	0.9	1.3
7011	2.9	4.8	5.0	—	25.6	68.2	—	—	102.1	19.4	2.1	26.5	8.4	23.2
Hotels, Motels & Tourist Courts (108)	**1.1**	**2.0**	**14.7**	—	**95.5**	**136.1**	—	—	**146.8**	**8.3**	**3.4**	**9.0**	**3.2**	**11.0**
	0.2	0.9	47.9	—	326.7	305.5	—	—	318.3	4.0	6.2	2.6	1.5	3.5
7361-7369	4.4	7.0	12.3	—	18.9	10.0	32.4	—	19.3	13.6	0.6	12.4	24.0	39.5
Personnel Supply Services (145)	**2.3**	**3.0**	**36.8**	—	**46.8**	**20.9**	**44.5**	—	**24.3**	**8.4**	**1.7**	**4.5**	**12.4**	**26.6**
	1.5	1.9	84.4	—	106.8	43.2	62.7	—	41.4	5.2	3.6	2.4	7.4	16.0
7622	5.0	9.7	3.3	—	9.2	32.4	16.0	—	42.2	6.9	1.6	23.3	20.3	29.5
Radio & Television Repair Shops (101)	**2.2**	**3.8**	**10.6**	—	**28.7**	**62.3**	**29.2**	—	**83.8**	**4.3**	**2.8**	**9.2**	**12.9**	**17.3**
	0.8	2.0	43.0	—	70.7	99.3	39.0	—	175.3	2.1	5.5	4.3	7.5	11.2
8051	2.1	3.7	10.5	—	34.9	42.0	17.8	—	58.7	15.6	2.0	9.5	7.8	24.6
Skilled Nursing Care Facilities (104)	**1.5**	**2.1**	**32.8**	—	**117.5**	**93.9**	**24.8**	—	**93.1**	**10.4**	**2.6**	**3.1**	**3.1**	**8.9**
	0.8	1.2	74.0	—	363.8	225.9	33.5	—	137.6	5.6	4.3	0.7	0.3	0.6

—Ratio not computed, for lack of necessary figures.

WHOLESALING

Line of Business and no. of concerns reporting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
5013	1.6	4.7	23.5	35.7	27.3	4.3	25.9	5.9	35.4	5.6	5.3	7.7	10.9	17.3
Automotive Parts & Supplies (106)	**1.2**	**3.1**	**40.4**	**59.4**	**49.9**	**10.7**	**33.5**	**4.7**	**43.4**	**4.3**	**6.7**	**3.7**	**7.1**	**13.6**
	0.8	2.4	72.2	84.0	94.4	32.9	42.9	3.3	56.1	2.6	9.5	1.7	3.8	8.7
5181-5182	1.4	3.5	29.2	51.5	42.7	15.3	3.2	18.0	19.3	21.3	0.9	4.6	16.3	36.2
Beer, Wine & Distilled Beverages (114)	**0.7**	**1.9**	**63.8**	**91.7**	**87.4**	**43.3**	**12.0**	**12.4**	**26.9**	**11.7**	**3.0**	**2.9**	**12.9**	**22.3**
	0.4	1.4	123.0	134.1	164.5	90.9	20.4	7.8	31.2	7.3	5.6	1.1	5.2	10.7
5161	1.7	2.9	42.7	90.0	53.5	7.5	27.7	20.2	26.4	14.1	4.3	6.8	15.8	38.4
Chemicals & Allied Products (104)	**1.0**	**1.7**	**99.3**	**154.2**	**125.8**	**17.1**	**43.0**	**11.6**	**35.1**	**9.5**	**7.6**	**2.9**	**6.6**	**18.9**
	0.7	1.3	193.6	294.2	221.6	54.6	58.0	7.2	55.4	5.9	12.2	1.3	2.6	8.6
5136-5137	1.6	2.5	48.3	76.9	50.8	3.8	25.5	11.8	25.8	14.1	4.7	7.0	14.9	34.4
Clothing & Furnishings(113)	**0.9**	**1.7**	**118.4**	**110.2**	**129.4**	**8.4**	**44.9**	**6.8**	**39.2**	**7.6**	**8.1**	**2.8**	**6.3**	**16.7**
	0.5	1.5	195.6	159.4	214.5	18.5	60.9	4.6	47.5	4.7	12.2	1.6	4.0	9.0
5145	1.7	4.3	24.8	45.6	33.6	9.7	9.8	19.8	15.3	16.2	1.4	3.7	13.4	19.8
Confectionery (115)	**0.9**	**2.3**	**57.8**	**82.2**	**73.1**	**22.7**	**14.9**	**12.9**	**21.8**	**10.6**	**2.3**	**1.3**	**7.3**	**12.6**
	0.6	1.6	112.2	119.2	123.7	53.2	25.5	9.6	31.0	7.6	3.7	0.8	3.8	6.6

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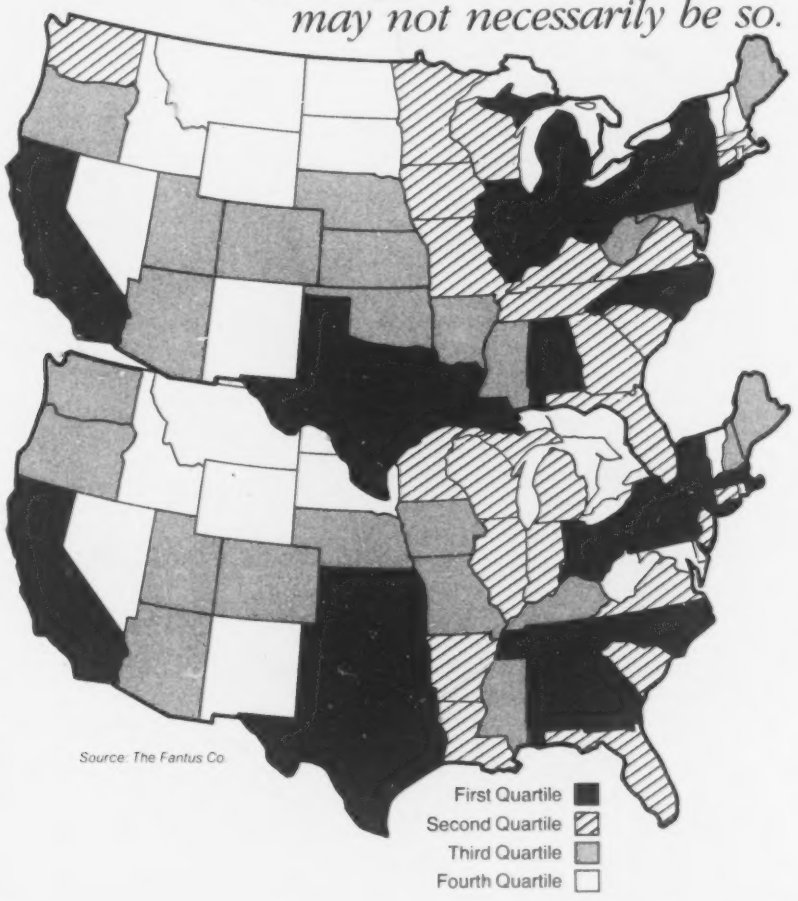
e of Business d no. of concerns porting	Quick ratio	Current ratio	Current liabilities to net worth	Current liabilities to inventory	Total liabilities to net worth	Fixed assets to net worth	Collection period	Net sales to inventory	Total assets to net sales	Net sales to net working capital	Accounts payable to net sales	Return on net sales	Return on total assets	Return on net worth
	Times	Times	Per cent	Per cent	Per cent	Per cent	Days	Times	Per cent	Times	Per cent	Per cent	Per cent	Per cent
143	1.6	2.2	35.7	140.2	45.8	18.8	16.7	67.6	15.5	39.6	3.7	3.2	12.0	28.2
airy Products (154)	**1.0**	**1.5**	**82.3**	**278.0**	**107.4**	**44.3**	**24.8**	**33.9**	**22.8**	**17.7**	**5.9**	**1.5**	**6.7**	**15.7**
	0.7	1.1	151.5	498.7	205.2	85.8	32.8	18.7	38.5	9.8	7.6	0.6	3.6	7.7
122	1.4	3.0	37.3	62.6	48.5	8.1	24.0	10.8	25.0	13.1	5.7	4.0	9.7	26.9
rugs, Proprietaries &	**0.9**	**2.0**	**77.9**	**97.8**	**98.0**	**16.1**	**36.5**	**7.5**	**29.3**	**8.8**	**7.9**	**1.6**	**5.3**	**13.6**
undries (114)	0.7	1.5	165.9	150.5	198.5	33.3	47.4	5.7	40.9	5.9	11.1	0.7	2.1	5.7
063	1.7	3.1	35.5	63.9	41.9	6.6	30.6	12.1	28.1	10.7	4.5	2.4	14.5	24.9
lectrical Apparatus &	**1.1**	**2.1**	**68.4**	**103.1**	**78.3**	**13.8**	**41.2**	**7.4**	**41.0**	**6.7**	**7.3**	**4.3**	**6.3**	**17.0**
quipment (105)	0.7	1.6	152.3	155.6	177.9	38.6	59.8	4.3	57.0	4.1	11.6	1.7	4.0	8.1
064	1.2	2.7	55.1	69.6	55.6	7.5	24.1	10.0	26.3	13.1	6.1	3.7	9.8	25.4
lectrical Appliances,	**0.8**	**1.9**	**101.3**	**105.1**	**105.6**	**11.9**	**34.3**	**5.8**	**34.3**	**8.1**	**9.6**	**2.2**	**4.8**	**11.2**
V & Radio Sets (116)	0.5	1.5	202.3	151.4	210.1	22.5	46.3	4.1	51.8	5.2	15.8	0.8	2.2	5.0
083	0.5	2.0	80.4	66.3	98.4	12.6	8.7	4.1	43.2	8.4	1.3	5.8	9.3	23.6
arm Machinery &	**0.3**	**1.5**	**164.1**	**81.3**	**192.9**	**21.9**	**15.3**	**2.7**	**58.3**	**5.7**	**3.8**	**2.6**	**4.8**	**12.5**
quipment (107)	0.1	1.3	274.7	97.9	336.2	38.1	31.3	1.9	79.3	4.1	13.5	1.2	2.1	5.5
139	1.6	3.5	37.9	63.1	41.8	2.0	45.2	8.1	33.9	7.7	5.7	4.3	8.6	20.7
ootwear (166)	**1.1**	**2.2**	**74.7**	**106.5**	**94.1**	**6.0**	**59.4**	**5.0**	**47.8**	**5.2**	**10.6**	**2.8**	**5.0**	**11.2**
	0.7	1.5	191.0	160.4	218.6	12.7	81.3	3.7	59.7	3.5	17.2	1.1	2.2	5.2
5021-5023	2.2	4.0	28.3	52.1	32.8	4.6	24.8	9.9	28.3	9.5	3.3	5.0	15.1	20.6
Furniture & Home	**1.1**	**2.5**	**61.4**	**87.9**	**80.6**	**12.7**	**35.0**	**6.3**	**37.0**	**5.6**	**6.6**	**2.9**	**7.0**	**13.4**
Furnishings (104)	0.6	1.6	146.9	152.2	173.2	28.7	54.7	4.5	45.8	4.0	10.8	0.9	1.4	9.4
5141	1.4	3.5	35.1	56.6	44.7	13.0	10.6	18.5	14.3	24.7	2.3	2.3	10.2	20.3
Groceries, General	**0.8**	**2.0**	**89.7**	**89.4**	**107.7**	**28.9**	**16.7**	**12.3**	**18.6**	**15.1**	**3.8**	**1.3**	**5.5**	**13.9**
Line (108)	0.6	1.5	156.6	123.6	200.8	57.4	27.0	8.9	27.8	9.6	6.0	0.5	1.6	3.3
5072	1.8	4.5	28.5	45.0	34.7	8.0	30.8	8.8	32.6	8.3	3.6	6.9	14.0	25.4
Hardware (107)	**1.1**	**2.5**	**56.8**	**77.5**	**70.4**	**16.4**	**39.4**	**6.0**	**37.8**	**5.2**	**6.6**	**3.6**	**7.3**	**15.0**
	0.8	1.7	128.2	121.9	142.2	26.8	49.2	3.6	50.0	3.5	10.8	1.9	2.8	7.8
5084	1.9	3.5	30.7	67.7	40.1	8.4	32.1	11.9	29.8	10.2	4.1	7.3	12.8	24.7
Industrial Machinery &	**1.2**	**2.1**	**72.8**	**100.5**	**115.5**	**21.2**	**42.7**	**7.3**	**40.3**	**6.5**	**6.1**	**3.8**	**8.2**	**15.5**
Equipment (105)	0.8	1.6	134.8	158.2	189.8	41.9	56.2	5.0	64.5	4.2	9.8	2.1	3.9	11.2
5031-5039	2.0	3.6	28.4	63.0	37.5	8.1	24.0	16.1	24.6	13.8	3.3	4.1	14.3	30.0
Lumber & Other Construc-	**1.2**	**2.2**	**58.4**	**117.6**	**87.2**	**22.7**	**33.2**	**10.2**	**33.0**	**8.6**	**4.9**	**2.9**	**7.8**	**12.0**
tion Materials (104)	0.8	1.5	115.9	204.1	146.0	56.1	54.7	6.4	45.3	5.2	7.6	1.1	3.4	5.7
5147	1.7	2.9	40.9	109.0	54.7	14.4	12.0	53.8	11.0	40.3	1.4	2.3	11.5	27.3
Meats & Meat	**1.1**	**1.9**	**68.7**	**191.6**	**98.7**	**37.1**	**17.1**	**36.0**	**14.4**	**20.8**	**2.6**	**1.1**	**7.5**	**15.6**
Products (99)	0.7	1.4	133.8	263.0	232.0	66.0	25.5	23.9	19.9	12.1	4.5	0.7	4.5	10.6
5198	2.1	4.6	24.4	44.5	29.3	5.9	28.1	9.7	30.3	8.4	3.5	5.7	12.5	22.3
Paints, Varnishes &	**1.3**	**2.7**	**47.3**	**80.0**	**59.6**	**9.5**	**35.7**	**6.8**	**36.6**	**5.3**	**5.9**	**3.6**	**9.1**	**14.4**
Supplies (182)	0.9	1.8	100.4	118.3	130.1	22.1	47.8	4.8	47.5	3.7	8.4	1.6	3.9	7.6
5111-5113	2.2	4.2	28.0	54.7	36.0	8.5	30.2	15.2	24.0	12.5	3.3	7.3	12.5	27.9
Paper & Paper	**1.2**	**2.4**	**60.5**	**94.0**	**78.6**	**21.7**	**38.5**	**9.3**	**31.8**	**7.4**	**5.4**	**3.1**	**6.8**	**13.4**
Products (106)	0.8	1.6	144.3	163.6	164.4	44.4	47.8	6.4	44.2	4.6	9.1	1.3	3.3	8.7
5171-5172	1.9	3.2	31.5	89.4	37.1	17.0	16.4	46.4	13.4	30.2	2.5	3.3	13.4	35.3
Petroleum & Petroleum	**1.2**	**1.9**	**87.0**	**141.8**	**109.6**	**45.6**	**24.4**	**27.9**	**20.2**	**14.5**	**3.8**	**2.0**	**8.4**	**23.4**
Products (105)	0.7	1.3	173.2	299.4	226.6	65.7	38.6	11.3	32.7	7.4	6.1	1.2	5.9	13.3
5074	2.0	3.9	29.9	64.7	35.1	7.4	30.2	12.1	30.9	8.6	3.9	5.6	14.3	27.9
Plumbing & Heating	**1.3**	**2.4**	**64.5**	**97.4**	**73.3**	**16.5**	**39.4**	**6.3**	**38.5**	**6.0**	**6.4**	**3.2**	**8.3**	**12.5**
Equipment & Supplies (101)	0.8	1.8	130.4	146.4	144.2	32.4	48.5	4.5	48.0	3.9	8.8	1.5	4.0	6.8
5144	2.0	2.5	38.6	144.0	44.4	14.7	15.6	123.1	10.7	38.0	1.8	2.4	9.4	24.2
Poultry & Poultry	**1.1**	**1.7**	**79.9**	**252.1**	**100.1**	**35.9**	**20.8**	**64.8**	**14.4**	**19.9**	**3.5**	**1.0**	**5.7**	**12.7**
Products (137)	0.8	1.2	170.1	600.0	213.9	76.8	28.8	25.7	24.1	12.2	5.5	0.3	1.8	4.2
5014	1.3	2.8	43.6	72.4	57.4	14.2	27.3	8.6	34.4	10.8	6.9	3.9	9.2	18.9
Tires & Tubes (120)	**0.8**	**1.7**	**105.3**	**103.3**	**128.4**	**23.2**	**40.8**	**5.7**	**42.0**	**6.5**	**13.9**	**2.3**	**5.1**	**12.3**
	0.6	1.4	170.3	153.0	197.4	51.9	61.6	4.4	56.4	4.9	19.0	1.0	2.4	6.9
5194	2.0	3.9	29.2	47.2	34.6	7.7	11.6	21.4	12.0	21.7	2.1	1.4	9.7	16.9
Tobacco & Tobacco	**1.1**	**2.4**	**70.4**	**75.6**	**80.0**	**13.5**	**15.3**	**15.6**	**14.7**	**12.9**	**3.1**	**0.8**	**5.6**	**10.5**
Products (103)	0.7	1.7	140.8	115.9	175.3	24.0	19.7	10.9	19.5	9.2	4.6	0.5	2.5	6.0
5075-5078	1.9	3.8	32.1	74.3	34.5	5.8	31.0	12.0	32.3	10.8	4.2	5.1	11.7	26.5
Warm Air Heating	**1.0**	**2.3**	**74.6**	**113.6**	**90.3**	**16.9**	**42.3**	**6.5**	**41.7**	**6.4**	**7.5**	**2.9**	**6.5**	**13.3**
& Air Conditioning	0.7	1.6	160.6	182.0	160.6	36.3	62.4	4.4	54.2	4.3	12.6	1.4	3.4	6.7
Equipment & Supplies (131)														

Frostbelt vs. Sunbelt Sites: Avoiding Misconceptions

What appears on the surface may not necessarily be so.

Capital Expenditures: New Plants, Expansions and Equipment, (1975–1977)

Ranking of States by New Industrial Facilities (1975–1980)



by James M. Bruce, Jr.
Senior Consultant, The Fantus Company

Concern is mounting that the "Frostbelt" (Northeastern and North-Central States) is being drained of resources and opportunities by the "Sunbelt" (Southern and Southwestern States). However, this belief and other popular conceptions about industrial development trends deserve further investigation. Both corporate executives and leaders in the public sector should have a better refined understanding of the opportunities that exist throughout the entire United States.

Without doubt, there are serious problems in many communities throughout the nation's mature industrial region, just as vigorous growth is now taking place in certain parts of the South and West. The 1980 Census confirms that traditional population and economic centers of the Northeast and Upper Midwest have grown little, if any, in recent years. Substantial expansion, on the other hand, has occurred among the populations of the tier of states stretching from Virginia through Florida and Texas to California. Given the variety and magnitude of issues associated with population—legislative representation, status, federal aid—it is not inappropriate that such demographic shifts are generating attention.

FACT VERSUS BELIEF

Generalizations arising from the population changes in the Frostbelt and Sunbelt have been assumed to hold true for other issues. This is not necessarily so. Admittedly, manufacturing capacity also has experienced recent geographic changes, and, on a highly agglomerated basis, these shifts parallel population's in that the center of gravity has moved southward and westward. Any such sweeping statement, however, masks many details about what is really happening. Indeed, terminology itself tends to confuse: The Sunbelt's sunniness may promote population growth, but it is much less pertinent to its attractiveness as a plant site.

A common belief is that the South and West are siphoning off industry from the Northeast and Upper Midwest. Just as they have attracted people, the concept suggests, the Sunbelt states have successfully promoted a flow of

plants out of traditional manufacturing centers. Several reasons are advanced for this shift. The old industrial belt is physically and economically worn out, alleges one point of view, and will become an increasingly less efficient and more costly environment in which to operate. The Southern states have adopted policies designed to keep wages low and unions out, another argument says. In any instance, there appears to be some association between Sunbelt prosperity and Frostbelt troubles.

THREE "TRUTHS" EXPOSED

However, these concepts are not well supported by in-depth investigation of regional industrial development in the United States. Findings developed from recent study include the following —all of which contradict popular belief to some degree.

1. The older industrial states of the Northeast and Midwest have not lost all their appeal for manufacturing and related activity. On the contrary, many rate very well in several important indicators of ongoing industrial development. Employment has remained static or declined in many areas, but hard evidence of massive flow of plants out of traditional centers and into the Sunbelt is scanty.
2. The Sunbelt states are not universally expanding as centers of industry and related functions, nor do they have exclusive rights to growth. There are many parts of the South and West which are not developing well by any economic index. Additionally, some of the states experiencing solid industrial growth belong to neither the old manufacturing belt nor the Sunbelt.
3. Assumptions that changes in production capacity have been as recent and rapid as demographic transitions are not well founded. In fact, some Sunbelt states in the forefront of recent manufacturing-related growth have been extensively industrialized for decades. Their popularity in this regard predates loss of manufacturing jobs in the mature areas; relationships between growth in the Sunbelt and economic troubles in the North and Upper Midwest are quite unclear.

One of the most surprising findings of this analysis is the continued attractiveness of the old manufacturing area to industry. Between 1975 and 1980, New York, Pennsylvania and Ohio ranked high according to several significant indicators. They were among the top 25% of states with regard to the number of new plants announced, and this quartile accounted for over half the facilities planned throughout the country (chart on page 151). Along with neighbors such as New Jersey, Michigan, Illinois and Indiana, they were among the states that received the largest amount of capital investment for new plants, expansions, and equipment. It would be less surprising, but still significant, if the bulk of plant expansions occurred there, since it already has so much production activity. This is indeed what happened.

About 5% of the nation's industrial establishments move annually, but no more than 10% of these shifts are to a different, nonadjacent state.* The majority of plant relocations, accordingly, are intrastate, so a move in itself doesn't deprive a state of net industrial jobs. (However, changes in the nature of the plant, sometimes implemented simultaneously with the move, may affect the number of jobs provided, at least in the short term. Some of these consequences will be considered shortly.)

"MOVING" OFTEN OVERSTATED

The majority of new jobs, on the other hand, is likely to be generated locally. "Capturing" a plant that is moving has dramatic appeal; but even in growth states, most plant construction represents new instead of relocated capacity, and most employment opportunities are created from scratch rather than imported.

As a result, even in a state whose industrial job base is not growing, the supply of plants is constantly being replenished. Proposed laws that attempt to extract concessions from firms reducing or ceasing operation ignore the fact that many more firms are shifting position within a state than leaving it. The greatest impact of "runaway plant" legislation might well be to depress the business climate in the view of those considering the construc-

**The U.S. has over 360,000 manufacturing operations, two-thirds of which employ fewer than twenty people. The 5% mobility figure cited above excludes situations where a 3-employee machine shop moves from one partner's basement to another's garage.*

Industrialization Indicators

(Top Quartile of States in all Categories)

Total Number of Manufacturing Jobs (in thousands)

	1940			1980	
1	NY	1,461.2	CA	2,001.1
2	PA	1,130.6	NY	1,451.1
3	IL	857.5	PA	1,328.0
4	OH	841.4	OH	1,267.5
5	MI	717.0	IL	1,222.3
6	NJ	619.8	TX	1,048.9
7	MA	590 5	MI	1,007.2
8	CA	440.2	NC	824.2
9	IN	383.7	NJ	783.4
10	NC	325.9	MA	673.1
11	WI	279.7	IN	658.0
12	CT	283.2	WI	560.2

Manufacturing Jobs as Percentage of Total Nonagricultural Employment

	1940		1980	
1	RI	51.8%	NC	33.9%
2	NC	49.9	SC	33.0
3	MI	48.5	RI	32.9
4	NJ	47.2	CT	31.3
5	CT	46.9	IN	31.1
6	NH	45.7	NH	31.0
7	SC	45.3	OH	29.3
8	ME	44.8	TN	29.2
9	OH	44.1	WI	28.8
10	IN	43.8	MI	28.5
11	MA	41.3	PA	28.4
12	WI	40.3	AR	28.1
	(U.S. mean = 33.9%)		(U.S. mean = 22.4%)	

The ranking of states in order of industrialization has changed surprisingly little in the 40-year plus period for which detailed statistics are available. In terms of total jobs, Texas (14th in 1940) bumped out Connecticut, but other members of the top quartile remain. The 1980 ranking by production jobs as a percentage of total employment saw Tennessee, Pennsylvania and Arkansas displace New Jersey, Maine and Massachusetts. Between 1940 and 1980, manufacturing employment in the U.S. grew by about 90%, but total nonagricultural employment grew over 280%. Consequently, the percentage of U.S. jobs held by production workers dropped from 34% to 22%.

tion of new facilities. A persuasive argument can be made that a state's manufacturing employment decline results less from domestic shifts in industry location than from foreign competition. Heavy presence by sectors subject to such international competition—steel in Pennsylvania, autos in Michigan—bears a strong statistical relationship to a state's job base deterioration.

Certain generalizations can be made about new plants built in economically mature parts of the country. Most growth is taking place in suburban rings around larger cities. ("Suburban" must be loosely defined since construction often takes place dozens of miles out.) Not always, but often, these are replacement facilities for companies formerly situated closer in. They may be more automated and possibly employ fewer, less skilled, lower-paid workers. At least initially, they probably contribute negatively to a state's industrial job base. On the other hand, the fact that a company is prepared to make the investment and tolerate the major inconveniences of a relocation suggests that they are a better-than-average candidate for employment growth in the long term.

When planning where to locate a new facility, besides economic factors, quality of life enters into the decision. And no region has a monopoly on advantages

SHIFTING PERCEPTIONS ABOUT THE SUNBELT

Through most of the twentieth century, the popular image of the South and West was quite different from the pleasant environment implied by the term "Sunbelt." Waves of people left to escape desolate economic conditions. The area was a primary battlefield in the War on Poverty hardly a dozen years ago. Perceptions have reversed, and with good reason in many instances; but the prosperity brought about in Charlotte, Orlando and Dallas has failed to penetrate many large parts of the South and West.

Conversely, vigorous growth, also, is occurring in states which are neither traditional manufacturing centers nor part of the Sunbelt. Reasons for New Hampshire's success are fairly obvious—proximity to Boston's electronics industry and a more favorable tax and regulatory environment than Massachusetts'—but Kansas and Minnesota have no patent explanations.

A positive, pro-development business climate is highly desirable to private investors. Relatively low taxes and minimally interfering regulatory policy are clearly important. California continues to have a high tax burden, however—much of the property tax cost relieved by Proposition 13 has been shifted to other taxes, user charges and fees which fall heavily on industrial and commercial activities. The governor seems to have made it a habit to criticize industry and take stands harmful to its interests, an attitude which appeals to many zero-growth adherents in California. Yet the state continues to add new industrial development to the country's largest pool of production jobs.

In short, any generalization about industrial growth areas is overwhelmed with exceptions and contradictions.

Arguments that federal spending in the Sunbelt is at the source of its prosperity are misleading insofar as industrial development is concerned. The oversimplified example cited below illustrates how actions which may generate some localized prosperity can diminish an area's appeal for industry.

South Carolina's federal legislators in the recent past have used their clout and influence to promote defense facility construction within the state. Donaldson Air Force Base's massive transport fleets made Greenville the "Airlift Capital of the World," while local private industry continued to be oriented toward textiles, a traditional low-wage Southern activity. But since the base's 1964 closing, Greenville has become a rapidly growing, diversified, high-skill production center and has captured many tens of millions of dollars in new foreign plant investment.

One element that has had a significant effect on industrial location is federal environmental policy. If not specifically benefitting the Sunbelt, it has promoted dispersion out of traditional manufacturing centers. The Clean Air Act of 1970, passed in a burst of protectionist enthusiasm, has had some significant effects, which either were not recognized by its authors, or came about because of subsequent court action and regulatory zeal. There have been many instances where companies for which it made good business sense to remain, expand, or relocate into economically depressed communities could not do so because of this law.

Most of the larger cities in the industrial belt, and suburban sections for miles around them were unable to authorize construction of new facilities emitting even small amounts of certain pollutants. Had the states or local areas themselves been able to perform a benefit-cost analysis relating such tight pollution control to jobs and taxes won or lost, different decisions might have occurred. National improvement in air quality clearly is desirable, but the cost has fallen disproportionately upon older manufacturing communities.

WHY PEOPLE MOVE

Reasons why individuals move to the Sunbelt deserve some investigation. On the whole, the rationale of industrial workers who have relocated during the past decade is quite different from that of Okies or Southern blacks who moved North earlier in the century. Excepting hoboes and aging hippies, people who relocate out of the Northeast and Upper Midwest tend to be ambitious and relatively well-off. They seek improvement in lifestyles, and simple monetary gain is not necessarily the most compelling reason.

For many executives or senior professionals, it is a new experience to live outside the nation's largest metropolitan areas without a sense of being on the frontier. There will always be those who doubt that any real civilization exists beyond the far side of the Hudson or Charles rivers. However, just within a generation, cities like Dallas, Minneapolis and Atlanta have been successful in developing a cosmopolitan atmosphere and polish which make them truly attractive to a range of demanding individuals. The next smaller group of cities, including Raleigh, Lexington and Albuquerque, counts among its happy residents large numbers of sophisticated transplants whose parents might have rejected living there.

Regardless of the assets a location may offer, industry is not likely to invest in any community where it cannot transfer, recruit, or hire locally its managers and other skilled employees. Those sections of the South and West that offer large numbers of unskilled workers for the minimum wage (There are still many.) commonly fall short of the standards necessary to attract and keep more senior personnel and are often lacking in other criteria important for a manufacturing facility. Suggestions that the Sunbelt's appeal for industry comes wholly from the opportunity to cut labor cost are specious.

Nearby sports and recreation: just part of an area's overall lure

Finally, it is important to realize that extensive and ongoing industrial development in the Sunbelt has preceded both its relatively recent population gains and the well-publicized economic problems in the mature manufacturing areas. Indeed, the historical development and current status of manufacturing varies widely within the Frostbelt states. New England, the nation's oldest industrial area, has gone through several cycles including remarkable recent progress and may lead its westerly neighbors toward improved economic conditions.

Some Sunbelt states have been extensively industrialized for quite a long time. California and North Carolina, at either end of the Sunbelt and among its most vigorous states, have had a significant number of manufacturing positions since the Bureau of Labor Statistics began tabulating data in the 1930s. The nature of plants, character of jobs, and volume of investment have all changed for the better. It is essential to recognize, however, that at no time in the second half of the twentieth century have Sunbelt states been simply an industrial vacuum into which plants moved via osmosis or random relocation. On the contrary, part of the appeal of most growth centers has been a long-standing history of successful industrial activity.

SUNSHINE WHERE YOU FIND IT

Industrial prosperity in Sunbelt states reflects a mix of attractive and expanding communities interspersed within a larger number of less dynamic locales Growth, where it exists in the manufacturing sector, results from a package of many conditions well suited to the needs of particular industries.

No generalization will satisfactorily describe what is now happening in national distribution of production capacity, nor can it be really useful in providing direction to a manufacturer seeking to build a plant. Any well-founded location decision must consider dozens of geographical variables. Very substantial differences often exist across small areas, and just presuming that a location presents the best or worst of regional stereotypes can lead to disastrously faulty investment or failure to recognize real and important assets close at hand. No state is without advantages for certain industries; no state fails to attract some degree of new capital spending.

ABOUT THE AUTHOR

Jim Bruce is a senior consultant with the Fantus Company, Dun & Bradstreet's subsidiary, that specializes in location problem solving. The Fantus client list includes half of the *Fortune 500* and thousands of other businesses and government agencies.

Jim is a graduate of Emory University and holds a Master's from Harvard University. He conducted development functions for Atlanta and Pittsburgh and managed his own consulting business in Boston before joining Fantus nearly four years ago.

Color photos courtesy of Georgia Department of Industry and Trade

INVESTMENT UPDATE

Here's the current status of a number of investments, and a look at how they have fared over the past month and the past year.

Investment	(9/30/81) Recent Price	Value of $10,000 if invested: Month Earlier	Year Earlier
Common Stock (Index fund, capital gains and dividends reinvested)	$15.33/share	$ 9,497	9,727
per cent change		−5.03%	−2.73%
Bonds (30-yr., 11¾% Treasury Bond)			
MARKET VALUE	$77.936	$ 9,689.00	$ 7,858.00
ACCUMULATED INCOME		$ 122.00	$ 1,185.00
TOTAL		$ 9,811.00	$9,043.00
per cent change		−1.89%	−9.57%
Money Market Fund	16.57%	$10,136.00	$11,659.00
per cent change		+1.36%	+16.59%
Gold (Krugerrands)	$467.50/oz.	$10,429.93	$ 6,629.15
per cent change		+4.3%	−33.71%
House (new single family)	$89,100	$ 98,100	$ 83,700
per cent change		−9.17%	+6.45%

Sources: Vanguard Group Inc.; Salomon Brothers; Donoghue's Money Fund Report of Holliston, Mass. 01746; Deak-Perera Fifth Avenue, Inc.; Federal Home Loan Bank Board.

stream operations contributed 24% of the profits of the seventeen major U.S. companies Good follows. Most of these profits came from abroad. But with overseas refineries now operating at below capacity, the downstream profits share will plummet to less than 15% this year, Good calculates. Thus, the best plays among the oils will be companies with big production profits that can compensate for lackluster downstream returns.

Of these, companies with major domestic discoveries coming into production in the next few years will enjoy a special advantage, because the windfall profits tax rate is lower on production from newly found oil than from old oil. (Only domestic oil is subject to a windfall profits tax because it costs less than world oil.) Good figures that the lower tax rate makes new oil worth 50% more than old oil each time the world price of oil moves up, say, 4% a barrel. So the $64 question is: Who has found new oil that will be coming into production?

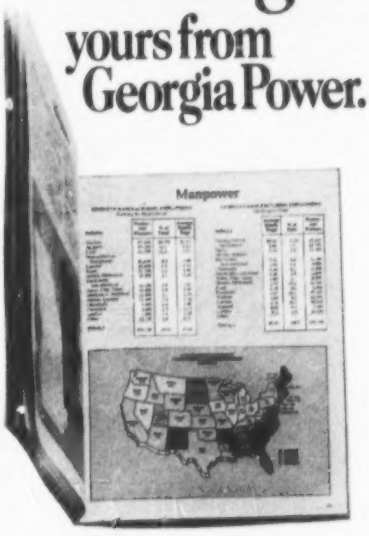
Special advantage

The answer boils down to a few major companies that already own positions in 1-billion-barrel or more fields, since only a world class field is large enough to make a measurable dent in the results of an oil giant. Of these, Good favors Standard Oil of California, which has hefty holdings in the major fields of California's San Joaquin Valley, the Rocky Mountain Overthrust Belt and Louisiana's Tuscaloosa Trend. "The Number One stock that everybody ought to own is Socal," he says. In addition, he notes, Socal is favorably positioned to make the best of the current squeeze in downstream earnings because the bulk of its marketing activities are in areas in which consumption has held up at above-average levels.

Good expects Socal's earnings per share to rise to $7.50 this year from 1980's $7.02 and show an even more impressive gain to $8.28 in 1982. Because Socal's price/earnings ratio is less than half its earnings growth rate,

More than 1,000 facts about Georgia

yours from Georgia Power.



The more you know about Georgia, the more you'll like the idea of locating your new plant here in one of the Sunbelt's prime areas. The *Industrial Survey of Georgia* tells nearly everything you need to know about Georgia's manpower, financing, energy and utilities, transportation, natural resources, taxes—even recreational and cultural advantages. This informative digest is just one part of Georgia Power's complete plant location service that for 54 years has helped companies like yours make the most of Georgia's abundant opportunities. The booklet will be sent without cost or obligation to rated manufacturers. For your free copy, just write on your letterhead to:

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